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THE PHILOSOPHY OF HISTORY

JOHN C. HEMMETER, Baltimore

Presented before the Section of Historical and Cultural Medicine, February 24, 1927

INTRODUCTION

Hippocrates says somewhere, " ἰατρως φιλοσοφως ισοθεος
"*God-like is the physician who is a philosopher.*"

It will be expedient to begin by giving some of the modern *Definitions of Philosophy*: In the following I shall present those

Of Driesch—"Philosophy as the understanding of givenness by 'Experience' must be one."

Of Lotze—"It is an endeavor to import unity and connectedness into the scattered directions of cultured thought, to follow each of these directions into its assumptions and into its consequences, to combine them all together, to remove their contradictions, and to form out of them a comprehensive view of the world; mainly, however, to subject those ideas which science and life regard as *principles* to a special scrutiny, in order to determine the limits of their validity."

Of Merz—"Philosophy may thus be defined as speculation carried on according to some clear method, and aiming at systematic unity." " . . . in the second we have to consider it as its own object, as a reflection on itself, carried on with the object of knowing its own origin, its laws, its validity, of certainty, completeness, and unity."

Of Ostwald—"The definition upon which the most representative philosophers would agree would probably be the follow-

ing: that philosophy is that part of knowledge which aims to bring together the generalities of the individual sciences and to unite them into an invariably connective whole or entirety."

Of Merz (a second definition)—"This is covered by all such intermediate thought as rests partly on knowledge, partly on faith, where certainty is largely mingled with belief. This large intermediate region, where changes and fluctuations are frequent and rapid, is the proper home of philosophy, which occupies itself with the grounds of certainty and belief, the origin of knowledge and faith, and the relations in which both stand to each other."

Before entering into the details of a study of the philosophy of history, it will be unavoidable to give a brief consideration to the mental apparatus and technique which historians as well as philosophers employ to penetrate into this subject and also for the purpose of mutually understanding each other. For this purpose, I concluded it was expedient to enter upon a brief consideration of the CATEGORIES (page 2-A, section B).

Historic Philosophy

Address

(1) History, Historic Science, Historiography and Historic Process are four different concepts.

There are three kinds of Historic Science.

(1) Narrative.

(2) Pragmatic.

(3) Genetic Historic Science.

(2) For further penetration into the essence of historic process, historians need the cooperation of philosophers, biologists and philologists. Our present languages of contemporaneous nations are inadequate to convey the meaning of deeper thoughts from one language into another, but more than that there are certain very deep thoughts or rather feelings, intuitions that baffle expression in any language (Merz, Vol. 3, p. 136, on *Kant's Terminology* in Baldwin's Dictionary of Philosophy, three volumes, 1901). In an article contributed by Josiah Royce, who also writes on *Hegel's* terminology, is contained a reference to *Eucken's History of Philosophical Terminology*. He states that

Mellin had written a six-volume analysis of Kant's Vocabulary in 1797 and yet Josiah Royce could say in 1901, one hundred years later, that "a thorough history of Kant's terminology is still to be written."

Solomon Maimon (1757–1800) after having studied the philosophies of Spinoza, Leibniz, Locke and Hume, came to study Kant's Philosophy. Kant himself had a high opinion of Maimon's ability and went to great length to say that he was the one of his followers who had understood him best. Maimon undertook to write a dictionary of philosophy, evidently recognizing the important part which verbal terms play in philosophy. (Merz 317.)

At the Sixth International Congress of Philosophy, Cambridge, Mass., September 13, 1926, the necessity of mutual understanding of terms and definitions by the philosophers of this and other countries must have been felt so keenly that the abstracts of the addresses by the various eminent philosophers in the sections which I attended consisted almost exclusively of definitions. The Congress was held from September 13–17, at Cambridge, Mass. On Tuesday, September 14, Professor E. B. McGilvary spoke on "Newtonian Time."

The great German philosopher, Herman Weyl, now at the University of Zürich, spoke on the "Time Relationships in the Cosmos." Professor A. N. Whitehead, of Harvard, also presented a paper on "Time" and E. V. Vassilieff, of Moscow, was represented by an address on "The Acquisitions and Enigmas of the Philosophy of Nature."

All of these papers were presented to the audience in the form of typewritten abstracts which were essentially definitions of various terms. I observed in the discussion that the philosophers were not in agreement among themselves as to what meaning should be precisely attached to any given word. Evidently a much greater degree of misunderstanding would ensue if biologists and historians were obliged to participate in such discussion. Professor E. G. Spaulding, of Princeton, who acted as Chairman of the Section One, Division A, requested me to act as interpreter for Professor Herman Weyl and in my efforts to make the remarks of the various discussions mutually intelligible, I became convinced of the urgent necessity of a Diction-

ary of Philosophy capable of being understood not by philosophers alone nor by biologists and historians alone but by all of them in general. This will require the cooperation of philologists with philosophic and historical training, but until this is done the history of philosophy will lack an effective vocabulary and correct diction.

Before continuing, I wish to make my stand clear concerning two prevalent problems in the writing of history, particularly medical history. These two problems concern (1) the succession of old doctrines by new ones, and (2) whether this succession is a simple accumulation, *i.e.*, merely adding one new thing to an older thing or whether it is an evolution. Surveying the total domain of biology historically, we can collect the material for the distinction between two kinds of knowledge. First, that which is actually demonstrable and well founded; second, that which is taken over from others. In other words, between (1) real and rationally grounded, and (2) accepted knowledge.

In aiming at this distinction, one arrives at two general rules. *First*, a general doctrine is not objectively overcome by another or subsequent doctrine, but that history shows that old doctrines outlive themselves and pass into oblivion, by agitation which criticizes only the surface of the old theory, and that a former doctrine is not deserted because its incorrectness is recognized, but for other not simply logical reasons. *Second*, the history of biological thought is not a mere succession of theories, but if the generality of things is held in view, history is an evolution of inwardly connected thought. This opinion, as we shall see later, is opposed to that of H. Driesch.

Definitions of Historical Science: Historical science is the science which deals with the facts of development of human beings as they occur in space and time. This development meaning the activities of human beings as social entities in connection with psycho-physical causality. Human activities may be of three kinds: (1) Singular activities, (2) typical and (3) collective activities. The development that is spoken of in this definition of historic science differs from the general biological development in this—historic science deals with the activities of human beings as social entities. By social entity is meant a subject in whose being is contained the power to act in a purposeful manner with ever-increasing and expanding consciousness.

In studying history, it is necessary to pay attention to causes of activities. Every historian would like to know the cause in any event that occurs, or any thing that happens. There are general and specific causes and conditions and it is not always wise to seek for specific causes when not immediately apparent. If we can find a general cause and elucidate the condition of a connection between historic facts, we are making a step forward even when a special cause is not obvious. (Bernheim, p. 633.)

The general causes and conditions are: (1) The state of the environment of various human beings in the different geographic regions. These are: (1) The distribution of land and water, of mountains and plains, the chemical and geological conditions of the soil, the climate, the fauna and flora, the prevalent phenomena of nature, whether volcanic or tranquil, the physical stature of man, the psychic qualification of man and the characteral dispositions connected therewith.

Eventually, we must also class the social world of values which emanate from the reciprocal inter-action between man and external nature and which integrate to form the state of any period of culture, *i.e.*, language, morals, religion, commerce, arts and sciences, law and state constitution, social and economic customs, etc. H. Taine, *Histoire de la literature anglaise*, groups most of these factors and conditions under the word *milieu* which has been adopted by Comte, who, however, restricts this conception by defining it as the "*Totality of exterior circumstances of any generation necessary for the existence of each determined organism.*" Taine, however, distinguishes between internal and external milieu. By exterior milieu he means the environment of nature; by interior he means the effects of the human environment on itself. The socialists define these two as "the natural and artificial milieu." A. D. Xenopol (*Fundamental Principles of History*, 1899) deduces all historic phenomena from two causalities: (1) General forces, (2) individual forces. The latter he calls "*circumstances*" because they are manifestations of forces as they are modified and transformed by particular circumstances, but in such a manner that the element of individuation gains more and more influence as the living organisms become higher organized.

Various Types of Historiography as Due to the Different Perspectives of the Historian: There are very few historians who

reach such mastership that their presentations exhibit a uniformly controlled study of all the factors that I have mentioned. It is regrettable that too often their mind has been dominated by one single perspective. One writer (Karl Marx) will be controlled by the economic materialism; another by philosophic ideas; another by the environment of nature, etc. Bernheim (*Lehrbuch der Historischen Methode und der Geschichtsphilosophie*) stigmatizes this narrow practice very well when he declares that it would be very one-sided if everybody considered *that* as the most essential part of history which he, himself, is especially interested in, or with which he occupies himself more particularly, *i.e.*, if the geographer wrote a history from the standpoint of natural influences, the anthropologist from the standpoint of race, the philosopher from the standpoint of ideas, the mathematician from the standpoint of reason, etc. Enough has been emphasized in this connection to demonstrate the necessity of a very broad and generalizing aspect of all of the external and internal factors of history in order to produce the effect of reality in our historical presentations.

Categories: According to Aristotle and Kant. In their relation to historic science, the term category has come down to us from Aristotle, one of whose books is so named. *The Categories or Predicaments* are to be understood as an *attempt of a comprehensive classification of all that exists for the purposes of logical affirmation,* proof or disproof. The following are among the categories: Quantity, quality, substance, relation, action, passivity, position in space, position in time, possession, situation. In my endeavor to show that there are certain mental qualities which a historiographer makes use of sometimes unconsciously, I do not refer to the categories of Aristotle, but to the categories of Kant which are conceived under an entirely different point of view. Kant's categories refer to *certain forms supposed to be inherent in the understanding itself, under which the mind embraces the objects of actual experience.* The Kantian philosophy supposes that human knowledge is partly made up of the sensations of outward things —color, sound, touch, etc.—and partly of intuitions existing in the mind prior to all experience of the actual world. This is the point of difference between the school of Locke—who rejected all innate ideas, conceptions, or forms—and the school of Kant. No such

question was asked under the Aristotelian categories. Kant's enumeration of his innate forms is as follows: (1) Quantity, including unity, multitude, totality; (2) quality, including reality, negation, limitation; (3) relation, including substance and accident, cause and effect, action and reaction; (4) modality, which includes possibility, existence, necessity. These indicate the elements of our knowledge *a priori;* it being the opinion of the author that such notions as causation, necessity, etc., cannot be obtained from the exercise of our senses and intelligence upon the world of realities, but must have been somehow or other imprinted upon the mind originally.

Kant, in trying to define the categories which lie at the basis of the world of thought, had simply accepted those categories which he observed to be in use in our daily thinking and in science. He treated them as a fixed set of principles. Regarding the origin and the mutual relations of these categories he has no extended theory. The categories are, for him, ultimate facts of our intelligence, determining its constitution, but of unknown source. Hegel, on the contrary, regards it as one of the principal tasks of philosophy to show why and how we come by just these categories which we use in the interpretation of experience, and in the ordering of life. His principal work, the "Logic," is devoted to such a treatment of the categories. And in fact, since, from Hegel's point of view, the world of "Thought" is the only real world, or, in other words, since the constructions of that absolute process which embodies itself in our thought and in our life are constitutive of *all* truth, this logic, which is to show the true genesis and nature of the categories, takes the place of all that, in the older philosophical systems, had been called metaphysics. For the theory of the absolute constructive process which expresses itself in our experience and in our thinking is simply the theory of the universe. There is no other world to know than this world which thought constructs, which experience observes, and which constitutes our life and its meaning. (Quoted from the article on Hegel by Josiah Royce in *Encyclopaedia Americana,* Vol. 14.) It must be evident, even to minds untrained in philosophical analysis, that such a mental equipment as the categories of Kant must inevitably play an important part in historic science and historiography. There is one

department of knowledge where we know positively that history has happened and we also know some of the factors concerned in it. In fact, Driesch states that this is the only field in which we know there actually are historical facts, and yet none of this history can be understood by us except through the agency of a psychic *modus operandi,* the categories. One of the most modern of all biologic philosophers, Driesch, in *The Science and Philosophy of the Organism,* devotes thirty pages of Volume 2 of this work to his interpretation of the Kantian Categories in order to make clear his conception of Entelechy. The word Entelechy is taken from Aristotle and means something at work in life phenomena which bears the end in itself, ὃ ἔχει ἐν ἑαυτῷτό τέλος. In order to understand his conception of the categories and their applications to Historic Science, it is necessary to quote Driesch from page 297 of his 2nd Vol. (l. c.) Category is a constituent of the irreducible conceptual scheme according to which reality becomes the object of human consciousness. A category is a certain concept or proposition which is applied in any attempt to understand the given. It seems to me that there is hardly any doubt with regard to the mere presence of such categories in the human mind. Even Hume and his modern disciples would not deny it, though they see nothing more in the categorical system than the mere effects of a "habit" or an "economy" of the mind, which may be strengthened by "inheritance." We ourselves do not believe that individual habit or economy would have been able to endow the categories with the character of absolute validity which they undoubtedly possess—at least with regard to the subject; and to admit any kind of "inheritance" with regard to them would seem to us both metaphysical and self-contradictory, for the concept of inheritance is itself a result of categorical conceiving.

The Categories of Causality and Substance: Categories render experience possible with regard to all that is given except themselves, they being experienced immediately, and irreducibly during our becoming conscious of givenness. Categories, in other words, create nature, so far as the matter is a cosmos, instead of a chaos. The cosmos is systematized in science. Categories are brought to consciousness by a very limited amount of acquaintance with givenness. The systematization of nature by means of a

category thus becomes a problem. Categories *are*, though they are not created. We know that they are by our own psychologic introspective experience. The category of substance is brought to consciousness in this immediate way by experiencing the permanence of the Ego during the change of the consecutive conscious states; the category of causality becomes conscious, whenever I feel that I move bodies in nature by the movement of parts of my body, which is a body in nature itself. It thus becomes evident to us that our minds are in possession of an apparatus which, though we become aware of it by experience, is nevertheless preceding experience. The categories of all human individuals do, however, not interpret givenness in the same way, and it is my conception that the inner psychic mechanism of man must correspond in a certain sense to the constellation of forms in givenness or in nature before an idea can be awakened. The word, idea, is the most celebrated one in philosophy, and in modern language is very much misinterpreted. From what I have said just now, it is evident that no man can ever produce an idea by his own will. The production of an idea, or, let us say the "becoming aware" of an idea, is conditioned by a fitness of the inner constellation of categories in the mind with the environmental constellation of factors and forces impinging upon man's psychic state. The inner must fit into the outer constellation like a key into a lock. Now such a coordination of inner and outer constellations is not under human control. It is the factor X, and impresses me as an entelechian factor.

Categories and Entelechies: Ideal Nature and Organic Nature: All the elemental constituents that science operates with are modeled and formed according to the category of relations. Then the categories of quantity, quality, space and time serve to give definite character to each constituent. Eventually the general notions of actuality and possibility complete the picture. Thus the constituents of nature which are known as mass, and force, and perpetual energy are created. All of these instances as such occur in the sciences of the inorganic. Some philosophers have introduced the conception of the *ontological prototype*. All of the ideal inorganic nature corresponds to the totality of possible relations that may be established from the point of view of pure ontology (Kant) in combination with the

simple character, categories of quantity, quality, space, time, actuality, and possibility. Ontology is the doctrine of abstract being or existence, and it is Driesch's opinion that we can not understand nature except in so far as science is capable of coordinating ontological prototypes in our mind with natural givenness. In order to make these profound concepts clear, we have to understand the categories and, above all, that some of them allow us to create elemental constituents with regard to spatial nature, but not *in* spatial nature. Driesch asserts that entelechy is a constituent of external nature, but yet it is unimaginable. It is conceivable, but not imaginable. But the same can be said of factors with which physics deals: for example, force or potential energy, or a constant of any kind, although they are in space, are not imaginable, though they are conceivable. The force of gravity is not imaginable, but only conceivable. And therefore life can be better understood by the concept of an entelechy just as inorganic nature can be better understood by the concepts of energy, force, and mass.

ADDRESS DELIVERED AT THE ANNUAL MEETING, UNITED HOSPITAL FUND, APRIL 19, 1927

SAMUEL W. LAMBERT

It is a privilege to represent the medical profession of New York as the recently elected President of The New York Academy of Medicine. It is my opportunity, as one of the oldest professional workers in the hospitals of the city still on active service, to talk to the representatives of those hospitals who are assembled here to receive each his share of the United Hospital Fund of $600,000 to be distributed for 1926–27.

During the forty-two years that I have been on hospital service, beginning as an interne in Bellevue in 1885, I have served as attending physician in five institutions (Vanderbilt Clinic, Nursery and Child's, Lying-In, New York, and St. Luke's Hospitals) and have been also a trustee of four of the member hospitals of this association. Let me state that my experience has demon-

strated that whatever differences of opinion may from time to time arise in the relations of the governing bodies of the hospitals and their medical and surgical staffs, there can never be any real divergence of interest between these two groups always active in hospital work.

In speaking for the Academy of Medicine I wish to emphasize the work of its Committee on Public Health Relations which has been going on for sixteen years. That committee formulated the beginnings of the work of two important bureaus which are intimately associated with the United Hospital Fund, the Committee on Dispensary Development, which has just finished a six-year period of independent study with valuable results in the field of out-patient clinics, and the Hospital Information and Service Bureau, which forms a part of the activities of the United Hospital Fund.

The trustees of this fund have several important duties to carry on. *First:* The raising of donations and their distribution to the associated hospitals on a basis of free service both in the wards and, beginning this year, in the out-patient service as well. May a hitherto outside observer like myself give a word of advice for the future that special care be taken in adopting rules for estimating free hospital days so that there will be no tendency to promote extravagance of administration. In no sense do I offer this as a criticism of the present administration of the fund. *Second:* Now that the program of the Dispensary Development Committee has been completed, it will be necessary for the United Hospital Fund to resume a more active interest in the out-patient services. *Third:* The Hospital Information and Service Bureau renders two important functions: it spreads among the associated hospitals a knowledge of hospital needs and progress and it carries on research in methods of management and economy in hospital work. This association is thus an educator of its own members. It is most interesting to note that during the past year 1,715 requests for hospital surveys and suggestions, many from outside of New York, have been made of this bureau.

There is another close link between the United Hospital Fund and the Academy of Medicine which is carried on at the Academy under the supervision of its Committee on Medical Education. This committee investigates every clinic and course of instruc-

tion offered by the physicians and surgeons of the metropolitan hospitals and keeps a bulletin board at the Academy on which every accepted and approved course is filed. Medical education is an inseparable and necessary part of hospital work. In its minimum development it consists of the education of the attending and interne staffs. At present the teaching of undergraduate students in the hospitals of the city is much reduced in amount because of the reduction of the numbers of students by the medical schools. But there is an increasing opportunity to offer to graduates special courses of instruction either under the wing of the universities and medical schools, or quite independent of such support, under the endorsement of the Academy of Medicine. It has always been my conviction that no hospital fulfils its complete function unless its professional staff are active teachers of medicine and surgery and its many specialties. All of these functions are of great importance as aids in the raising of money and in the bringing home to the lay public the need of hospital support from the philanthropic public. A proper emphasis of these activities, which are corollaries to the eleemosynary work of hospitals, will increase the size of the United Hospital Fund and make easier its collection.

It cannot be amiss to call to your attention the relation of the individual physician to his hospital work. He serves without pay and assumes before the law entire financial responsibility for his professional work. So far as any lawsuit for damages for alleged injury to patients or malpractice is concerned, the hospital is immune. The medical profession should not become subject to any general campaign for financial support of hospitals by individual donations. The medical profession will always be most useful to stimulate interest in hospital work and to secure financial support and donations even when they do not become donors themselves. There has come up for discussion in this connection the question of the payment of salaries to all hospital physicians. This is now done in many clinic positions and in some special hospitals as well, and is universal so far as laboratory and workers in medical sciences are concerned. It will be studied by the Academy of Medicine and the question must be met by the hospitals also. I confess that I am old-fashioned enough to be quite unconvinced at the present time of the advisability of the general adoption of such a plan.

The practice of medicine has become increasingly complicated and therefore expensive, not only to the private patient, but to the hospital patient as well. The extensive use of special diets in nephritis, anemia and diabetes, the use of costly medicinal agents such as transfusion and the routine with insulin, the increasing use of the x-ray and electrocardiograph, and of the chemical and bacteriological laboratories for diagnosis and treatment, have placed the physician in the position of being a chief cause of enlarged expense to all up-to-date hospitals. Although this is a legitimate expense it must be watched to avoid extravagance.

But, in conclusion, let me emphasize that the interests of hospital managers and hospital physicians are identical and that no antagonism can rightly exist between them.

ABSTRACTS OF PAPERS PRESENTED AT SECTION MEETINGS

Section of Ophthalmology, May 16, 1927

EXPERIMENTAL STUDIES OF TRACHOMA[1]

(A Summary of a Study)

Chronic Granular Conjunctivitis Induced in *Macacus rhesus* and Chimpanzee by Inoculation of Cultures of a Microorganism Isolated from Cases of American Indian Trachoma

Hideyo Noguchi

As a result of the study by bacterial cultures of material derived from five cases of trachoma occurring in pupils in the Albuquerque Indian School, Albuquerque, New Mexico, a microorganism has been isolated which induces in *Macacus rhesus* monkeys and in the chimpanzee a chronic granular conjunctivitis resembling that observed in the patients from whom the microorganism was obtained. The diagnosis in the cases studied was

[1] From the laboratories of the Rockefeller Institute for Medical Research.

made by Drs. Parlett and Richards, of the U. S. Indian Service, and in all instances scar tissue was present at the time of collection of the material. Re-examination by Dr. Richards one year after the material was collected showed that trachoma was still present.

Direct inoculation of the conjunctiva of *Macacus rhesus* with the trachomatous material failed to induce infection, the animals remaining normal during four months of observation. The material was injected subconjunctivally on the upper lid, and at the same time the tarsal conjunctiva was slightly scarified with the needle point of the charged syringe.

Various bacteriological procedures were employed, including several which in recent years have been used successfully in the isolation of highly parasitic organisms. Besides the effective microorganism, which was obtained from four of the five cases, four other kinds of bacteria were isolated from the material studied, including (1) *Staphylococcus albus* and (2) *Bacillus xerosis,* both of which were present in all five cases; (3) a minute Gram-negative, motile, mucin-producing chromogenous bacterium which grows well on ordinary culture media, and which was obtained in all but one case; and (4) a large, sarcina-like organism, sometimes Gram-positive, sometimes Gram-negative, which was isolated from four cases. The microorganism which proved to be active is a minute Gram-negative, apparently non-motile, pleomorphic bacilliform organism, which grows on a semi-solid medium containing fresh animal serum and hemoglobin but not on any of the ordinary culture media and only occasionally on blood agar.

Macacus rhesus monkeys were used for testing the pathogenicity of the cultures, the inoculations being made by subconjunctival injection and epithelial scarification. The staphylococcus, which was inoculated into three monkeys, gave rise to an acute purulent conjunctivitis which completely subsided in about ten days without producing chronic inflammation. The inoculation of *B. xerosis* into two monkeys produced no appreciable effect. The sarcinoids were inoculated into twenty monkeys and the motile bacillus into ten. The largest number of animals was used in the case of these two organisms, because they appeared at first to be more unusual and therefore more promising than the others.

Both induced a moderate mucopurulent conjunctivitis which lasted about a week, but no follicles developed during several months of observation. Somewhat later five monkeys were inoculated with a mixture of two strains of the Koch-Weeks bacillus; no conjunctivitis and no follicle formation developed. The results of all these tests indicated that none of these five organisms, all of which grow on ordinary culture media, is capable of inducing granular conjunctivitis in *Macacus rhesus,* and that the conjunctiva of this animal does not easily react with follicle formation.

The effects were wholly different after the inoculation of the non-motile bacillus which grew only on the special media. Twelve monkeys altogether have been inoculated with this organism, of which eight have developed a slowly-progressing chronic granular conjunctivitis resembling trachoma in the localization and character of the lesions. The effects became noticeable in two to four weeks after inoculation, and the lesions gradually extended over the tarsus. In the course of from two to five months the appearance of the inoculated conjunctiva approached more and more that of the human trachomatous conjunctiva in the early stages of the disease; follicle formation and tarsal thickening occurred. In one monkey (*M. rhesus* 84) scar formation in the tarsal conjunctiva became apparent seven months after the inoculation. In several monkeys (Nos. 79, 85, 127) the uninoculated eye soon became involved, owing to spontaneous transmission from the inoculated eye, while in one instance only (No. 84) the condition remained confined to the inoculated eye until experimentally transmitted to the other side.

In three monkeys inoculated with the same culture the lesions developed, remained for a short time, and then receded. In only one monkey was the inoculation entirely negative.

The lesions induced in the conjunctiva of *rhesus* monkeys by means of the cultures were directly transmitted to normal *rhesus* monkeys in several instances. In four of the monkeys to which direct transfer was made the lesions are still progressing, in two they have remained stationary, and in three they have receded. In three animals the direct inoculation of material from culture monkeys failed. The character and localization of the follicular lesions in the four passage monkeys were identical with those in the monkeys successfully inoculated with cultures.

From the upper eyelids of one of the passage monkeys transfer was made to two *rhesus* monkeys and two chimpanzees. One of the *rhesus* monkeys developed very mild lesions, the other escaped infection. One of the chimpanzees, however, developed within four weeks a chronic granular conjunctivitis which has steadily progressed. For four months the lesion was confined to the inoculated (left) eye, but at the end of that time the other eye also began to show the granular condition. The granules are grayish, succulent, and contiguous with one another, occupying the cul-de-sac, fornices, and nearly half of the tarsal conjunctiva. The conjunctiva of the lower lid is also studded with similar follicles. There is general papillary hyperplasia and a slight mucopurulent secretion. The other chimpanzee inoculated at the same time showed only a transient reaction.

A small portion of the lesion removed from the chimpanzee by grattage forty-nine days after inoculation gave rise to characteristic lesions in a *rhesus* monkey. The transmission of the disease from *rhesus* to chimpanzee and back to the *rhesus* monkey clearly shows the communicability of the condition.

The non-motile bacillus requiring special conditions for cultivation has been recovered from *rhesus* monkeys on two occasions and also from the chimpanzee. It is, however, difficult to isolate, since it does not grow on plate cultures, necessitating that the material used for inoculation must be relatively free from contaminating organisms.

The bacillus has occasionally been demonstrated in sections and films derived from human and monkey materials.

In microscopic characters the lesions produced in *Macacus rhesus* closely resemble those of human trachoma. The only striking difference arises from the fact that the conjunctiva of the monkeys possesses no adenoid layer between the epithelium and the tarsus and no papillae comparable with those in the human conjunctiva; hence in this species the papillary hyperplasia of the tarsus is absent. Nevertheless, wherever there occurs in the monkey eyelid sufficient loose subconjunctival tissue there arise typical lymphoid infiltration and follicle formation, as shown in the regions near the cul-de-sac or fornix. The epithelial and subepithelial layers of the monkey eyelid over the tarsus often show a marked infiltration, though it is not of the papillary type.

The characteristic appearances of the follicle—the darker-staining small lymphocytes in a laminated periphery and a lighter germinal center of large vesicular mononuclear cells, often capsulated—agree in human and monkey lesions. In both the follicles contain the so-called Leber's *körperchenzellen* or Villard's phagocytes, and mitosis of the germinal center is common.

In the *rhesus* monkey (No. 84) in which the scar tissue was present, the lymphoid infiltration and follicles had almost disappeared at the time of the animal's death from tuberculosis seven and one-half months after inoculation. The deformed tarsi were covered with thickened epithelium, and a degree of entropion existed.

The disease known as trachoma among the American Indians has all the characteristics of classical trachoma and leads to the same disastrous results. It is a chronic granular conjunctivitis which ends in deformity of the lids through sclerosis of the mucosa and tarsi and impairment of vision through pannus. Trachoma has been transmitted directly from man to chimpanzee and lower monkeys by previous investigators (Nicolle, Morax and others), but so far as can be ascertained from their publications pannus was not observed among these animals. No one has produced a similar result with pure bacteria. The culture obtained in the present investigation produces on inoculation in monkeys the essential clinical and pathological changes described in the direct transmission experiments. That failure followed the direct inoculation, and yet positive results were secured from the cultures, may be explained by the fact that the original material contained too few bacilli to break down the natural resistance of the conjunctival tissues, while the large numbers of bacilli in culture accomplished this effect. The similar instance of Oroya fever may be cited, in which a rich culture of *Bartonella bacilliformis* is capable of inducing infection of monkeys, whereas the original blood, from which the cultures were obtained, is unable to do so.

Section of Surgery, January 7, 1927

FRACTURES OF THE TRANSVERSE PROCESSES OF THE LUMBAR VERTEBRAE

ROBERT H. KENNEDY

There is apparently considerable difference of opinion in regard to the frequency, importance and method of treatment of fractures of the transverse processes of the lumbar vertebrae. From the scarcity of references in the literature one would think the lesion either rare or of little moment. Some even suggest that it is non-existent, the X-ray appearance being due to bony abnormality. A knowledge of the amount of disability caused is important for one thing in estimating insurance loss, as many of these are compensation cases. Some state that prolonged immobilization or more radical procedure is necessary, apparently feeling that they are dealing with an injury followed by considerable disability. This paper reviews the literature and our experience in ten cases at the Surgical Clinic of the Beekman Street Hospital.

Among injuries to the back, fractures of the transverse processes of the lumbar vertebrae are not rare, although it is to be emphasized that bony anomalies in this region are frequent, and may tend to confuse the diagnosis. The most common cause of fracture of the transverse processes is direct violence. The symptoms and physical signs are those of a severe sprain or contusion of the back. Such fractures are usually multiple. When uncomplicated by body fracture, all the fractures are usually on the same side.

The disability caused by the injury is due solely to the associated contusion or sprain of the back, and the presence of the fracture is negligible as far as prolongation of disability is concerned. Owing to the frequency of traumatic neurosis, it is preferable that knowledge of an existing fracture be kept from the patient. Bony union of the fractured transverse processes is definite in some of these cases. More careful examination of backs should be made before employing men over forty at hard labor.

The treatment required is rest in bed, heat and massage. Prolonged immobilization is no more necessary than in any contusion or sprain of the back. In this series patients were able to walk after an average period of sixteen days. Disability over six months is out of the ordinary. The majority should be at work within two months with practically no complaints referable to the injury.

Section of Surgery, January 7, 1927

METABOLISM IN BURNS*

(Surgical Phases)

JOHN J. MOORHEAD
JOHN A. KILLIAN, Ph.D.

If we regard a burn as a wound due to thermal, chemical or electrical trauma we immediately place such lesions in a group of well-understood traumapathies. If, further, we recognize that burns are potentially infected wounds from the outset, we again align this group with other well-understood lesions of the superficial and deep tissues.

It is not the purpose here and now to detail the diverse etiology, symptomatology or therapy of burns, but rather to revert to some of the by-products of burns in an attempt to show that the local and systemic manifestations partake of the metabolic reactions common to infections in general, particularly to wound infections. From a clinical standpoint, it is a common observation that burns of like origin, of like local effect, are widely diverse in their systemic effects upon persons alike as to sex, age, race, occupation and station in life.

We have long recognized, for example, that shock from a burn may appear early, it may be delayed for from 3 to 7 days, or it may appear as late as the 14th day. Children, in particular, are prone to manifest these early, intermediate or late shock phenomena, and the causation has usually been ascribed to psychic

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trauma, to infection, or to the absorption of burnt tissue. And these manifestations are by no means limited to extensive burns, deep or otherwise. Burns by electricity are supposed to be less painful, heal more rapidly, and in general offer a most favorable prognosis. Our observation scarcely confirms this, and we have rarely seen an electrical burn in the absolute sense, most of them being in reality heat burns or flame burns, as from ignited clothing or singeing of the hair.

In some crushing wounds, as from run-over accidents, there is a retarded or late shock definitely assignable to absorption of devitalized tissue. This is in effect a protein reaction, anaphylactic shock.

We have tried in this series of cases to show the nature of this reaction in terms of blood chemistry in the hope that we could thereby suitably alter the circulating blood, thus preventing or minimizing this form of shock. We have also attempted to determine the bases for speedy repair, aiming to provide the system with means to combat infection in the belief that wound sterilization is in the last analysis best attained by auto-débridement accomplished through the medium of the circulating blood rather than through the agency of antiseptics however highly these are vaunted. It is especially needful at this time to cling to the clinical fact of the ages in regard to the inefficacy and inevitable insufficiency of antiseptics in the treatment of any form of infected wound. It has been abundantly proved that antiseptics act only by virtue of mechanical cleansing, by virtue of dissolving amenable slough, by staining and thus fixing the organisms, and by a process of local germ killing that must be limited if the tissues themselves are not also to be killed. We know that we can only sprinkle the surface by any antiseptic and yet year by year some new sprinkling agency is exploited to beguile or befog us. At this moment we are in the Bolshevik stage of antiseptics, the profession is seeing red, and we are urged to become surgical flappers and daub wound rouge on every break in the skin. Worse than that, we are importuned to use this rouge intravenously, although we learned a score of years ago to avoid mercury in wound treatment when bichloride and its allies were the then certain means of attaining wound salvation. It would be interesting to write an article with the title "Antiseptics I

have known," but the difficulty would be to keep up with the necessary additions, corrections and deletions.

If there is no antiseptic of proven value in the treatment of wounds in general, it must be equally true for burns. And this is indeed the fact, for there is no final agreement as to the best procedure for the management of burns.

The laboratory will eventually solve this infected wound problem for us by showing us how to alter the circulating fluids in such a manner that organisms of a particular type cannot grow in a given habitat. In horticulture this soil reaction is a matter of relatively easy determination, so that forestry, for example, is governed by the chemistry of the soil as well as by climate, altitude and proximity of rocks or flowing streams. The organisms that defoliate a forest have in many instances been checked not by spraying the trees with chemicals or poison gas, but by altering the nitrogenous content of the soil.

There is in this study an attempt to ascertain the nature of the soil to the end that by changing the habitat certain undesirables may be forced to migrate because their provender has been discontinued, or it has actually been rendered toxic to the uninvited guests, who, vandal-like, are seeking to loot territory temporarily depleted of guardian forces.

Up to this time our own method of managing burns has been to regard them as infected wounds passing through three phases of evolution.

The first phase is that of local inflammation, virtually a dermatitis characterized by redness, pain and swelling. Here our plan is to apply a wet dressing of sodium bicarbonate (5 to 10 per cent.) keeping the dressings moist by a fenestrated tube suitably arranged to sprinkle the entire area. We do not disturb this for the two- to four-day period of this phase, systemic pain being controlled by morphine, the shock being suitably combated by rectal drip or otherwise.

The second phase is that of exudation, and this we seek to control by exposure of the entire surface to the open air, to sunlight or to the rays from 50 watt bulbs. We protect the discharging surface by a cradle or wire mesh. At night, or if crusts form, we cover the area with a gauze dressing soaked in equal parts of sterile olive oil and camphorated oil. We know

that this exposure method best provides unimpeded drainage and effectively prevents absorption and thus lessens fever and other systemic manifestations.

The third phase, that of cicatrization, also responds to this same exposure method, and in addition we occasionally add a wound fertilizer in the form of scarlet red ointment, one dram, to sterile olive oil, one ounce.

At all times we seek zealously to prevent contracture by keeping in advance of it, and thus posture and planned gymnastics are as much a part of therapy as the dressings or external applications. This form of pre-physiotherapy is just as applicable in burns as are early massage and mobilization in a joint fracture. For example, in wounds of the face and scalp we insist that the patient grimace frequently, blow out the cheeks and chew gum in an attempt to prevent deformation so common in this area.

We reserve débridement for that group, as in other wounds, in which there is localized destruction, not attempting it unless the local and systemic conditions warrant. If used indiscriminately it may be a source of real danger, or it becomes more mutilative than curative. The greatest sphere of usefulness for débridement is that form of burn associated with localized wet or dry gangrene manifested by demarcated sloughing, or parchment-like attempted repair. There is also a small group of burns in which early débridement and immediate plastic repair may be attempted to prevent inevitable contractures leading to later plastics.

We have had no personal experience with chemical débridement, as by tannic acid, carbolic or zinc. Of these, the tannic acid procedure seems to have the greatest merit.

We know of no method to prevent keloidal formation, but our observation is that it is less prevalent since the adoption of the exposure method. It is our practice not to interfere surgically early in keloids because many of them spontaneously recede, and others are softened by X-ray therapy.

For burns of minor degree there is no real objection to occlusive dressings of the paraffin type; but obviously a retentive covering has no more place in a discharging burn than it has in a discharging wound from any other source.

But after all, we are only accomplishing a very small part when we thus treat our infected wounds, burns or otherwise. Our aim should be so to alter the circulating fluids that these inherently would be reparative as well as antiseptic. It is therefore interesting to know what blood chemistry shows in burns, and with that in view my collaborator will give you in detail the results of his study of a small number of cases, 15 in all. This material has been obtained from Bellevue, Gouverneur, St. Vincent's and the Post-Graduate Hospital, and we wish to acknowledge our thanks to the surgeons who have contributed to this investigation. In passing, it is pertinent to say that much time and effort are required of the laboratory staff to amass even what may appear to be so meager a group of facts. We may also say that a similar line of investigation has been carried out in a group of fractures to determine whether or not the calcium and phosphorous content of the blood offered prognostic criteria. Our theory was that a fracture, virtually a wound of bone, might show alterations akin to the findings in soft part wounds. Thus far we have not been able to show any substantial changes, and we do not believe that calcium and phosphorous alterations are anything more than chance findings or normal variants in bone healing. We are convinced that non-union in fractures is not dependent upon demonstrable deficiency either in calcium or phosphorus. The obvious corollary is that these elements play no essential part in wound healing, and if this be true, then the CO_2 content may be the greater factor. In this connection it is interesting and suggestive to know that Dr. Thomas Buchanan, in charge of our Post-Graduate anesthesia department, has shown that he can alter the clotting time of the blood during an operation by changing the amount of CO_2 in the anesthetic. He believes that the amount of oozing is also controllable through the inhalant, and in this respect at least we all can record the clinical observation that certain anesthetics apparently produce oozing more than others.

Now all of this, meager and somewhat vague as yet in respect to wound repair, brings us a step nearer in our attempted control of infection. We have all seen in sepsis the occasional almost miraculous effect of injections of milk, or typhoid or diphtheria serum, and we regard their effects as a form of protein reaction.

Recently we deliberately planted pyocyaneus in a bed of streptococcus and the green weed grew abundantly and smothered the coccus, and while the patient recovered with a stiff elbow, yet the arm was saved.

It is an old trick in farming to rotate crops, to plant buckwheat when the soil is almost exhausted, to revitalize by a definite and radical chemical change in the soil itself.

My belief is that something of this same sort is taking place in our present conception of infected wounds, burns and others. We are getting away from the spraying, the irrigating, the fertilizing, and are in effect reaching back to the soil, knowing that if we can alter it at will, we can determine at will the products thereof.

I do not believe infection will be abolished by the discovery of any polyvalent antiseptic, any universal sterilizant; but on the contrary, our problem will be solved by discovering a means to alter the circulating blood in such a way as to render the tissues competent to repel organisms by changing the chemistry of the blood and of the tissues themselves. This may be by a diet rich in some new element—a vitamin X—for example. But it will not be by the use of any germ killer in the form of a spray, irrigation or fertilizer; nor will it be by the use of artificial light such as a conservatory or hot-house might employ; nor will it be by any electrical device designed to alter or foster superficial growth. It will be all these things in one, for it will be an agent capable of reaching every invaded cell through the medium of the cell's own circulation.

METABOLISM IN CASES WITH CUTANEOUS BURNS

(Laboratory Phases)

JOHN J. MOORHEAD
JOHN A. KILLIAN, Ph.D.

This investigation into significant chemical changes in the blood and urine in cases of cutaneous burns was begun in March, 1925. Since that time reports have appeared in the literature related to similar phases of the problem. Hence some of the facts we have to present are not entirely new. Their presentation, however, is

necessary for the interpretation not only of our results, but also of the data of others.

Our object in the study of the metabolism of burns was twofold. (*a*) The majority of the subjects, particularly of industrial burns, are healthy individuals, and the study of their metabolism after burns enables us to get information concerning the effects of an extensive destruction of body tissue, the extent of which can easily be estimated. Such information of the changes due to tissue destruction and repair is essential for the interpretation of the results of blood and urine analyses in infections associated with protein catabolism, *e.g.*, wound infections, pneumonias, etc. (*b*) Toxemia and blood concentration are among the theories proposed to explain the cause of death in superficial burns. If cutaneous burns are accompanied by a toxemia, we may get in the analyses of the blood and urine some information concerning the nature of the toxemia. Such data can be utilized practically to prevent the development of the toxemia by proper modification of the diet, or by the use of indicated therapeutic agents.

Since Wertheim in 1868 believed death after cutaneous burns to be due to a toxin circulating in the blood, various investigators found what they thought was a toxic substance in the urine of burn patients. The compound has been variously described as muscarine, pyridine and a ptomaine. Robertson and Boyd (1923), from experimental studies on rabbits, concluded that death occurring within the first twenty-four hours was due to primary shock, and later than this to a toxic shock. According to these authors there is a toxin produced in the burned tissue, in larger quantities in skin burns, which circulates free in the blood, or is absorbed by the erythrocytes, and this toxin produces the toxic symptoms seen in burn cases, rise in blood pressure and temperature, or in some cases, death. Whole citrated blood from burn cases is toxic, but blood serum is not. Solutions of the erythrocytes are more toxic than the whole blood. Robertson and Boyd believe that the toxin consists of two parts, (*a*) a thermostabile, diffusible and neurotoxic substance and (*b*) a thermolabile, colloidal and necrotoxic substance. The toxic substances are believed to be composed of primary and secondary proteoses.

Davidson states that the clinical picture of burn cases indicates that fatal results must be due to a toxemia caused by absorption of devitalized tissue. Precipitation of the devitalized tissue protein obviates the production of the toxemia.

Underhill and Pack have observed in 23 cases of severe burns a marked concentration of the blood, the extent of which is estimated by determinations of the hemoglobin. Similar changes have been reported by Underhill in influenza and lethal war-gas poisoning. When the hemoglobin is increased to 125 per cent. of the normal, conditions for the maintenance of life become precarious. Man and animals cannot long withstand an increase of 140 per cent. These authors have also noted a decrease in the blood clorides, and these changes they believe are due to transudation of plasma in the edema formation. Davidson has also noted a decrease in the blood and urine chlorides, but was unable to account for this decrease in a concentration of the blood.

In these preliminary studies our analyses of the blood and urine have been extensive in order to get a comprehensive view of metabolic changes in cases of cutaneous burns. According to Williams' figures for the normal hemoglobin of the blood of adults (15.0 to 16.6 per cent.), in but 4 of the 15 cases have we found an increase in hemoglobin. In these 4 instances, the hemoglobin figures were 17.0, 17.0, 18.2 and 19.7 per cent. The maximum increase was 115 per cent. of the normal. However, these bloods showed no other evidence of concentration, since the total solids were not increased above the normal.

A high non-protein nitrogen of the blood was found in all but four patients. This increase in non-protein nitrogen occurred in the first specimens obtained after the burn. In three patients dying within two to ten days after the burn, high figures in urea nitrogen were also seen. This increase in blood nitrogen was not due to renal impairment. The total nitrogen of the urine was diminished during the first four or five days, but was followed by a compensatory rise. In a few instances unusually high figures for amino-acid nitrogen of the blood was observed, these figures corresponding in time with the maximum figures for non-protein nitrogen. In the changes in the icterus index of the blood, and in urobilin output in the urine, we have evidence of an impairment of liver function. There was also seen an in-

crease in the ratio of ammonia nitrogen to total nitrogen, due, we believe, to a ketosis.

A marked decrease in chloride excretion in urine was noted in all cases, accompanied in most instances by a decrease in blood chlorides. The changes in blood chlorides, however, were insignificant compared to analogous changes in the urine. Following the period of chloride retention there was an increased output of chlorides in the urine. The variations in chloride concentration in the blood, or of chloride excretion in the urine, bore no relation to the observed concentration of the blood, moreover it could not be attributed to edema formation, vomiting or any demonstrable gastro-intestinal pathology.

Section of Neurology and Psychiatry, January 11, 1927

THE SENSORY FIELD OF THE FACIAL NERVE INTRA-ORAL REPRESENTATION

S. L. Ruskin

The interesting cases contained in this report are offered as further clinical support of J. Ramsay Hunt's work in the sensory field of the facial nerve. The geniculate ganglion lying upon the knee of the facial nerve contains unipolar cells the axones of which divide T-shaped into two processes: one passing centrally through the nervus intermedius of Wrisberg to the medulla, the other passing peripherally as chorda tympani and greater superficial petrosal nerves, the latter forming an important root for the nasal ganglion. In my contributions to the study of the sphenopalatine ganglion I have demonstrated the importance of the greater superficial petrosal nerve in the causation of headache and neuralgia of the back half of the head and neck. This paper presents part of my study of the distribution of the sensory fibers of the facial nerve. Hunt, in his studies, has tried to trace the sensory elements of the facial nerve through a study of herpes zoster manifestations from the geniculate, the sensory ganglion of the facial. Such a method is necessarily in-

complete because herpes is only one manifestation of nerve disturbance and the clinical material is extremely limited. I recognized that the greater superficial petrosal which represents a sensory root from the facial to the nasal ganglion is responsible for a large part of the so-called Sluder syndrome. By cocainizing the nasal ganglion I can, to a large extent, anesthetize the sensory system of the facial and control the pain in herpes zoster oticus. I find this, therefore, a valuable method for the study of the sensory distribution of the facial nerve. In this paper I am tracing only the intra-oral distribution.

The first case reported is that of Mrs. A., age 56, who came to my office complaining of difficulty in hearing on the right side, tinnitus and vertigo. Her complaint dates back two and a half years ago when she began suffering from a burning sensation at the tip of the tongue on the right side and a bitter taste along the side of the mouth. This was associated with a feeling of fullness and scratchiness in the throat and itching of the roof of the mouth and the right side of the face. She also complained of pain in the back of the head radiating to the right shoulder. Her right eye felt as though it were set in a frame with a burning sensation around it. At this time she complained of a deficient sense of taste on the right side. The right side of the face and lips felt somewhat numb.

Examination revealed the following findings: Slight ptosis of right eyelid, diminished corneal reflex. Nasal examination showed a mild atrophic rhinitis. Aural examination showed a spontaneous vestibular nystagmus with the rapid component to the side of the lesion, spontaneous pass-pointing to the right, slight tendency to fall but not distinctly to either side. Functional testing showed a complete loss of vestibular and cochlear function.

The burning at the tip of the tongue and the taste disturbance along the side of the tongue indicate involvement of the sensory root of the facial nerve. This, together with loss of function of the auditory nerve, suggested the diagnosis of a cerebello-pontine angle tumor, which was confirmed at operation.

The second case is one showing the intra-oral distribution of the facial following an acute facial neuritis with paralysis and incomplete recovery. It is the case of Mrs. M., who complained

for the last three months of a very sweet taste in the mouth on the same side as the paralysis. This was associated with burning and sticking pains at the tip of the tongue and noises in the ear of the same side. The taste disturbance was so great as to overshadow her other complaints. She suffered from severe attacks of vertigo and right hemicrania, with pains extending into her neck and shoulder. In addition she had rhinorrhea and sneezing. Three years ago, following a severe attack of rhinorrhea, she developed a complete right facial paralysis which lasted for two years. Now it is present to a small extent. The sticky pains in the tongue she traced back to the onset of her paralysis. Examination revealed a chronic bilateral ethmoiditis and chronic tonsilitis. Anesthetization of the terminal endings of the greater superficial petrosal branch of the facial at the sphenopalatine (nasal) ganglion, immediately stopped the sweet taste in the mouth and burning of the tongue as well as the hemicrania and vertigo.

Here we have a case of inflammatory involvement of the facial nerve in both its sensory and motor portions, the sensory manifestations of which could be controlled at the nasal ganglion.

The third case demonstrates the same symptomatology. Taste disturbance in the mouth and pain at the tip of the tongue associated with profuse salivation and severe vertigo probably due to a peripheral lesion, catching the fibres of the greater superficial petrosal at the nasal ganglion, with some irritation reaching back to the communication with the VIIIth nerve and centrally to the nucleus salivatorius. The case is that of Mr. J., aged 63, who complained of a bitter taste along the left side of the mouth which began two years before as a salty taste on the left side of the mouth, changing in a few months to a bitter taste. He suffered also from a burning pain along the left side of the tongue, most severe at the tip. Since the onset he has had profuse salivation on the left side and severe attacks of dizziness every two or three weeks, necessitating his going to bed for from one to three days. The attacks of vertigo were frequently associated with nausea and vomiting. The character of the vertigo he described as rotary and at times it would be a sensation of falling away from the objects he saw. In cold weather he suffered from rhinorrhea and slight pain in the left maxillary region.

Nasal examination revealed a bilateral ethmoiditis, otherwise the findings were negative. The patient had had an ethmoidectomy on the left side one year prior to his coming to see me. During the two years of his complaint the patient had undergone almost every conceivable form of treatment with no results. Because of his age the vertigo was attributed to arteriosclerosis and his taste sensation to gastric disturbance. Anesthetizing the nasal ganglion gave him immediate relief. Following the alcohol injection by the route which I have published for the injection of the sphenopalatine ganglion, the patient was relieved of all but the profuse salivation.

Summary

The first case demonstrates sensory disturbances in the mouth from involvement of the facial nerve by a cerebello-pontine angle tumor.

The second case illustrates the same disturbance in a case of facial neuritis with facial paralysis.

The third case shows the similar symptomatology through irritations of the greater superficial petrosal branch of the sensory portion of the facial nerve and originating in the sphenopalatine (nasal) ganglion.

In all of these cases the pain or burning at the tip of the tongue and the taste disturbance in the mouth could be blocked at the nasal ganglion, thus giving further clinical support to those physiologists who claim that the greater superficial petrosal branch of the facial nerve carries sensory and taste fibres.

Section of Pediatrics, January 13, 1927

EPIDEMIC MENINGITIS IN THE FIRST THREE MONTHS OF LIFE

JOSEPHINE B. NEAL
HENRY W. JACKSON

The literature on epidemic meningitis in infancy is meager.

In the very young the symptoms are so atypical that we believe the diagnosis is often not made at all, or not until late, which accounts for the high mortality.

We are limiting our study to those cases occurring during the first three months of life.

We have fifty-four cases with the following etiological distribution:

Age	Meningococcus	Pneumococcus	T. B.			
3 mos.	25	7	5			
		B. coli	Influenza	Mic. Cat.	Total	
		3	2	1	54	

The cases due to the meningococcus greatly predominate.

The outstanding symptoms in infancy are gastro-intestinal. Onset is fairly acute and the symptoms do not respond to ordinary treatment. Fever is irregular and child is irritable and hyperesthetic. The classical signs of meningitis are usually absent until late. Always look for a bulging fontanelle. We are usually called in consultation when the case is well advanced.

Our treatment is conservative. A lumbar puncture is done every 24 hours, as much spinal fluid is drawn off as possible and 20 cc. of antimeningitis serum administered intra-spinally, if it runs in easily by gravity. We give serum intravenously only in septicemic cases and resort to ventricular or cisternal punctures only when there is a blockage.

In our group of 25 cases, two are not included in the mortality as treatment was refused. We had a mortality of 47.8 per cent. on the remaining 23 cases.

Our youngest patient to recover was first seen when 25 days old, and on the second puncture no fluid was obtained, but the serum ran in readily. This also happened on the 4th, 5th and

6th puncture. This is an instance where many would have resorted to ventricular or cisternal punctures and would have attributed the recovery to those methods of treatment.

Our sequelæ have been surprisingly few. Of the twelve recovered cases one could not be traced. Of the eleven followed up one is deaf and the other ten made complete recoveries.

Section of Pediatrics, January 13, 1927

ENCEPHALITIS ASSOCIATED WITH MEASLES

JOSEPHINE B. NEAL
EMANUEL APPLEBAUM

It has been recognized for a long time that the various acute infections as measles, scarlet fever, pneumonia, pertussis, etc., may be followed by encephalitis. While we have seen a few instances of encephalitis following various of the acute infectious diseases, by far the largest number, twelve, have been associated with measles. During the year 1926, particularly, we have seen a comparatively large number, eight.

The clinical picture is of a highly variable character. The onset of this condition was usually sudden and developed during or a few days after the attack of measles. Fever and headache were almost constant symptoms. Convulsions were present in about half the cases. The most striking of all the symptoms were changes in the mental condition, varying from a mild degree of irritability or apathy to profound stupor or delirium. Some form of paralysis was present in one third of our cases.

The physical signs were chiefly those due to varying degrees of meningeal irritation or increased intracranial pressure. Stiffness of the neck, Kernig sign, Brudzinski sign, bulging fontanelle or positive Macewen were noted in a fair proportion of cases. The condition of the reflexes was highly variable. While ocular symptoms were rare, they were rather striking when present. One case was apparently blind. Fixed dilation of pupils was present in two cases. There were also two instances of nystagmus and strabismus.

One or more lumbar punctures were performed in every case. The fluids usually came out under increased pressure and were clear in all but two instances, which were contaminated by a few red blood cells. Practically all the spinal fluids showed some evidence of abnormality. There was usually a slight or moderate increase in cells, most of which were mononuclears. In most instances there was also a slight or moderate increase in protein content. The sugar was uniformly normal or high. Smears and cultures were all negative for organisms.

It is obvious that all forms of encephalitis present more or less similar clinical pictures. The diagnosis of our cases of encephalitis associated with measles was based almost exclusively on the manifestations of encephalitis occurring during or shortly after an attack of measles. Indeed there was nothing in the clinical picture alone to rule out definitely epidemic encephalitis. It may be noted, however, that the onset was more sudden and with one exception the duration was much shorter than is usually the case in epidemic encephalitis.

Six cases are cited to illustrate the various types of this condition.

Of the twelve cases in the series three died, a mortality of 25 per cent. Seven of the nine recovered cases were followed up. All made a prompt and complete recovery with one exception. This patient, after an illness of more than eight months, has become a mental defective. He also has frequent *petit mal* seizures.

It is obviously impossible to make a definite statement as to the etiology and pathology of this condition. The subject certainly merits further study.

Section of Pediatrics, January 13, 1927

A STUDY OF TUBERCULIN-POSITIVE CHILDREN IN FOSTER HOMES

ARTHUR FORREST ANDERSON

The report comprises a study of tuberculin-positive children in a large foster home department. The 127 children followed, ranging from four months to seven years of age, belonged to the group of so-called latent or inactive tuberculosis.

These children were placed in individual homes in and about New York City, and were followed at frequent intervals by the workers. The results were extremely encouraging and pointed to the adaptability of the plan of home-care on a larger scale.

Section of Otology, January 14, 1927

THE PHILOSOPHY OF THE OLDER TESTS OF HEARING

ROBERT SONNENSCHEIN, Chicago

The purpose of functional testing is to determine the presence and degree of impaired hearing, if any, and, secondly, to decide the location of the hearing defect. In the examination of the hearing functions the voice, acoumeter, watch, Koenig rods, tuning forks, resonators, whistles, monochord and audiometers are employed. Observation of the patient is an important factor with reference to the loudness of the voice, attitude of head, lip reading, etc. The otoscopic examination includes a careful inspection of the external ear, the tympanic membrane and mastoid region, the nasal, nasopharyngeal and pharyngeal regions. When testing with the voice by means of unaccentuated whisper or conversation, the patient's eyes are closed or averted and the opposite ear occluded. High and low tones and combinations of both should be used. After inflation of the ears, again test with the voice.

Tuning forks are used very largely to determine the upper and lower tone limits, as well as the carrying out the Schwabach, Weber, Rinne and other tests: The prongs of the fork move in transverse vibrations of great amplitude but slight intensity, while from the stem arise longitudinal vibrations of great intensity but small amplitude. Testing for the low limit begins with C–2 (16 d. v.) fork and proceeds upward. For high tones C–4 (1028 d. v.) and C–5 (4096 d. v.) forks are used. For still higher tones a modification of the Galton Whistle, such as the Edelmann-Galton or Schaefer-Galton is used, or best of all the monochord, with which the highest tones may be tested both by air and bone conduction.

The Weber test for the determination of the lateralization of sound to one ear or the other is made by placing the fork in the median line of the vertex, forehead or the root of the nose. Normally the sound is best heard in the head, but is lateralized to the worse hearing ear with conduction apparatus impairment, and to the better hearing ear with inner ear involvement. There are, however, a good many exceptions to this rule.

The Schwabach test is used for determination of the duration of bone conduction in the individual as compared with a normal living or objective control. The fork is placed in the median line of the vertex or upon the mastoid. Slight diminution or slight increase is of no significance. As a rule there is a definite lengthening of bone conduction with involvement of the middle ear apparatus, and a decided shortening thereof with impairment of the inner ear. The Rinne test used for comparison of air with bone conduction in the same individual is in many ways the most valuable of the tuning fork tests. The stem of the fork is placed on the mastoid and when no longer heard a prong is held close to the ear without touching the auricle or vibrissae, and the duration of hearing by air noted. Normally the Rinne is positive, that is to say, air conduction is much longer than bone conduction. In perception apparatus involvement the Rinne is also positive, but both air and bone conduction are shorter than in the normal. With involvement of the conduction apparatus, Rinne is usually negative, that is, bone conduction is longer than air conduction. There are about eight varieties of the Rinne test.

The Gelle test is used for determining the mobility of the foot plates of the stapes. Normally with compression of the air in the external auditory canal there is diminution of hearing if the fork is placed on the head, tubing or bulb connected with the external auditory canal. If there is a decided fixation of stapes no change in hearing occurs.

The Stenger test is used for unmasking simulation of total unilateral deafness. Two forks are simultaneously employed, the patient believing only one is used. Move one fork somewhat closer to one ear with the other fork vibrating at the opposite ear so that the sound of the nearer fork drowns out the sound entering the opposite ear.

Weber, Schwabach and Rinne are the most important tests and should be used in every case. The Gelle and Stenger tests are for special purposes, and if desired one may employ several other tests, such as the Politzer for determining patency of the eustachian tube, the Bing test for determining the change in bone conduction, and the Lucae-Dennert test for noting the difference of hearing between open and closed meatus.

Audiometers are used for quantitative and for obtaining audiograms which give a graphic record, showing loss of hearing in sensation units. Where forks are supplied with "constant" of damping or decrement, similar curves are had, but if many pitches are tested the process is more tedious than with the audiometer; but on the other hand, the forks are less expensive and the instrumentarian more easily transportable.

Section of Ophthalmology, January 17, 1927

THREE CASES OF PROGRESSIVE AMAUROSIS OF RETROBULBAR ORIGIN—RECOVERY OF VISION WITH FOREIGN PROTEIN TREATMENT

JULIUS WOLFF

These cases were examined and treated in conjunction with Dr. Joseph H. Globus, of the Neurological Staff of Mount Sinai Hospital.

They presented great difficulty in diagnosis to expert ophthalmological and neurological consultants, one case having been operated upon for suspected brain tumor, and in another an operation for supposed pituitary tumor had been decided upon before the treatment with foreign protein was resorted to. In the latter case an intercurrent febrile condition just before the expected operation brought on the first signs of improvement in vision which had been growing worse steadily for months. This fact suggested postponement of the operation and the use of foreign protein. At least two of the three cases were diagnosed as post-encephalitic complications.

The paper was summarized as follows. The points that these cases have in common are:

(1) Progressive loss of vision, first in the one eye, then in the other, without intraocular changes, even at the height of the development of the clinical manifestation.

(2) The development of gradually enlarging central scotoma.

(3) The development of hemianopsic fields, even though only relative in degree, and requiring careful perimetric examination for their detection.

(4) Diagnostic difficulties presented, even to expert ophthalmological and neurological consultants.

(5) The lack of response to the usual forms of treatment of retrobulbar lesions of the optic nerve.

(6) Absence of a toxic etiology.

(7) The prompt and progressively favorable response to the intravenous injection of typhoid vaccine.

While these three cases, especially in the absence of pathological evidence, are far from sufficient in number to draw definite conclusions therefrom, they have nevertheless points enough in common to suggest a clinical entity which might be designated a "Chiasmal Perineuritis" that may exist alone or in combination with other neurological manifestations.

Section of Medicine, January 18, 1927

PHOSPHATURIA

GEORGE BAEHR

The secretion of an alkaline urine, turbid because of precipitated alkaline phosphates, has frequently been observed to occur in neurotic individuals and in some patients troubled with gastric hyperchlorhydria. The symptoms of great bladder irritability may be out of all proportion to the gastric complaints, so that the latter frequently escape observation or are not even mentioned by the patient.

In spite of the fact that the bladder urine is milky in appearance because of the large amounts of calcium, magnesium and

other alkaline phosphates, the condition is not dependent upon any disturbance in phosphorus metabolism nor is there actually any increase in phosphate excretion. Neither is there any demonstrable increase in absorption or elimination of calcium or magnesium. In fact, an experimentally increased supply of phosphates, of calcium and of magnesium does not produce phosphaturia.

A study of four patients who suffered from intense and persistent phosphaturia has supplied us with additional evidence that the condition is primarily the result of a disturbance in the acid-base regulating mechanism of the body induced by an excessive loss of hydrochloric acid in the gastric juice. Normally there occurs a diminution in the acidity of the urine at certain times of the day, coincidental with the secretion of acid into the stomach after meals. This post-prandial alkaline tide in the urine was found to be greatly exaggerated in all cases of phosphaturia.

During the period of digestion there is a temporary loss of acid into the stomach, and in order to maintain its approximate neutrality the body must therefore compensate by excreting less acid in the urine (and less CO_2 in the alveolar air). In our cases of phosphaturia the persistent hypersecretion of acid into the stomach actually resulted in compensatory secretion of an alkaline urine. The phosphates, which normally occur in the urine as acid salts, were excreted under these conditions as alkaline salts in combination with sodium, potassium, calcium and magnesium, all of which, especially the latter two, being of relatively low solubility. If the urine had become frankly alkaline after a meal and insoluble alkaline phosphates had been precipitated, the subsequently reabsorbed acid was usually inadequate to redissolve them in the bladder.

The observations on our cases also confirmed the contention of Hubbard that the urinary alkaline tide is increased by foods which stimulate gastric secretion. The ingestion of such foods definitely increased the phosphaturia and the bladder irritation.

However, in our experience the ingestion of foods with a predominately alkaline ash (vegetables, potatoes and most fruits) plays a still bigger rôle in exaggerating and in prolonging the urinary alkaline tide. Even in normal subjects with normal gas-

tric secretion, the consumption of a diet consisting wholely of such vegetable matter resulted in the secretion of urine with a hydrogen-ion concentration of 7.8 to 8.0, and a true phosphaturia. In patients with clinical phosphaturia, the already exaggerated alkaline tide was still further increased and prolonged by the excretion of alkaline salts derived from these base-forming foods.

The therapy which best controlled the phosphaturia was primarily planned to reduce the urinary alkaline tide and keep the urine constantly acid. To accomplish this, it was necessary to control the three chief factors responsible for the disturbance in acid-base equilibrium—namely: (1) to eliminate foods which stimulate gastric secretion; (2) to reduce psychic factors by means of atropine and sedatives, and (3) to omit base-forming foods from the diet. Acids were also administered by mouth but this was not found to be nearly as valuable as the elimination of the base-forming foods.

In one patient during a period of great economic stress, even our acid diet did not control the condition completely during the post-prandial periods, and it became necessary to find some means of completely eliminating the urinary alkaline tide. This we succeeded in accomplishing by means of a Sippy diet. Both in a normal subject as well as in the patient with stubborn phosphaturia, all traces of an alkaline tide disappeared after 24 to 36 hours on a Sippy diet, the urine showing a hydrogen-ion concentration of remarkable constancy throughout the day. Apparently the Sippy diet results in a uniform secretion of gastric juice at a constantly low rate—which probably accounts for its value not only in phosphaturia but also in gastric and duodenal ulcer.

Section of Medicine, January 18, 1927

STUDIES OF EXOPHTHALMIC GOITER AND THE INVOLUNTARY NERVOUS SYSTEM

Summary of

XII. The Course of the Subjective and Objective Manifestations of Exophthalmic Goiter in Fifty Unselected Patients. Observations for Five Years Without Institution of "Specific" Therapeutic Measures ("Spontaneous Course")

Leo Kessel
Harold Thomas Hyman

The course of the subjective and objective manifestations of Exophthalmic Goiter has been studied in fifty unselected patients. No specific therapeutic measures have been instituted, and the patients have remained under observation for five years.

Seven patients have died, two of cardiac failure, two of thyrotoxicosis, one following a thyroidectomy done at another institution, and one each of infection and status lymphaticus.

Ten patients were not satisfied with their progress and sought specific therapy. One of these received endocrine products and another radium therapy. The latter did brilliantly. The remaining eight patients had subtotal thyroidectomy, and four of these patients did well, and in four the result was indeterminate.

Three more patients were lost from observation.

Nineteen, or 38 per cent., of the fifty original patients are regarded as failures, and include all the above classifications, the difference in figures being due to the fact that one man is included in two groups.

Of the remaining thirty-one patients, all have been followed to date, and are still under observation. They still retain many of their subjective symptoms, but in no instance are these sufficient to incapacitate them. The exophthalmos is unchanged, and they still have a pulse lability and occasionally a tremor. The B. M. R., which on admission was plus 43 per cent., fell to plus 22 per

cent. at the sixth month and plus 17 per cent. at the twelfth month, and remains practically unchanged for the succeeding years. These patients gained an average of eighteen pounds in the first year, and this was maintained, with a slight loss, throughout the succeeding years. Hospitalization averaged six weeks, and rest in the country five weeks. Over half of the patients were socially and economically restored by the third month, and by the sixth month all but three were restored, and have remained economically and socially restored for an average period of fifty-two months to date, despite the stress and strain of trying conditions among the poor in a metropolitan district.

The purpose of this report is the establishment of a norm or control, and it is not presented for the purpose of outlining a therapeutic policy.

Section of Orthopedic Surgery, January 21, 1927

THE ETIOLOGY OF CAVUS AND A NEW OPERATION FOR ITS CORRECTION

J. Torrance Rugh, Philadelphia

There are four types of cavus or hollow-foot—mild, moderate, severe and "claw-foot," but they are merely degrees of the same condition. The pathology has always been obscure but has been looked upon as a secondary rather than primary one. The etiology has generally been looked upon as—1, secondary to infantile paralysis; 2, due to gout, rheumatism or similar metabolic disturbances; 3, muscle imbalance, whether from paralysis of central or of peripheral origin; 4, the effects of gravity on paralyzed parts; 5, of congenital origin as in spina bifida, etc.; 6, bacterial or toxic irritation similar to Dupuytren's contraction of palmar fascia plus trauma.

The mild cases show involvement of the plantar fascia alone. The moderate ones show fascial and skin shortening. The severe present skin, fascial and ligamentous contractions. "Claw-foot" shows changes in practically every structure of the foot, including bones and joints.

A careful study of the plantar fascia shows first that there are three very important parts—(*a*) the main body, (*b*) a branch which runs up the inner side of the foot to unite with the annular ligament and (*c*) a branch which runs directly into the foot and attaches to the astragalo-scaphoid ligament. Pathologic examination of the involved fascia in fifteen consecutive cases showed cellular infiltration and typical fibrositis. This results in tissue which always tends to contract and makes this structure the primary factor in the formation of the deformity, but its contraction is aided and abetted by the muscle weakness or paralysis on the dorsum of the foot.

The cause of the inflammatory changes lies probably in the toxemia of the paralytic infection. In over forty mild and moderate cases thus far operated upon the flexor brevis muscles were not found contracted, and correction was obtained by careful and thorough removal of the three portions of fascia.

Operations are unsatisfactory because the underlying cause of the contraction is not removed and the contracting fascia is permitted to remain in the foot.

The author's operative procedure is to dissect out the three portions of plantar fascia thoroughly and remove a flap of fat from the side of the thigh or leg and place it in the denuded area so as to interrupt the vicious line of contraction. Fat does not contract. The wound is closed and the foot placed in a cast, avoiding tension on the skin of the foot-sole. Walking after two or three weeks, carefully fitted shoes of sufficient length, and daily stretching of the foot by the patient for six to nine months completes the cure. Tendon transplantation, tarsal arthrodesis, cuneiform osteotomy, etc., may be combined with the fasciectomy in the severe cases, if necessary.

The fundamentals of the procedure are *first*, the pathologic findings in the plantar fascia which cause it to contract and, *second*, the interruption of the contracting tendency by interposition of fat which does not contract.

Section of Obstetrics and Gynecology, January 25, 1927

A COMBINED CYSTOCELE RETROVERSION PESSARY*

HERMAN F. STRONGIN

A brief review of the anatomical and mechanical factors involved in the production of retroversion and cystocele serves to clarify the mechanical corrective features of the pessary in question.

The anatomical structures of the female pelvis, upon which retention of the normal uterus depends, may be divided briefly into:

1. Suspensory (Ligamentous).
2. Supportive (Muscular).

The muscular structures are primary in importance in considering the mechanical correction brought about by the pessary in question.

Muscles of { 1st line of defense (Levator Ani and Fascial covers).
2nd line of defense (Urogenital Trigone).

We are concerned particularly with the Levator Ani muscle fibres, which arise near the symphysis pubis; the pubo-rectal or pubo-coccygeal fibers. These fibers on either side form the margin of the Levator Ani which clasps the vagina and outlines the Genital Hiatus, through which pass the urethra and vagina. The anterior boundary of the Genital Hiatus is the Os Pubis.

The muscles of the Urogenital Trigone are accessory and less important in their supportive function.

Normally the uterus is in an anteverted, anteflexed position with the intra-abdominal pressure exerted upon its posterior surface. Increased pressure causes a lowering of the internal genitalia which follow the normal *give* of the supportive muscle sling.

If retroversion has occurred as a result of the usual pathological causes and exists without pelvic muscle injury, then prolapse seldom occurs. In cases of retroversion with coexisting pelvic

* Reported from the Gynecological Division (Post-Partum Clinic), New York Lying-In Hospital.

muscle injury, in the nullipara with an inferior muscle constitution, or in women with senile muscle atrophy at or after the menopausal age, the uterus then no longer impeded in its downward advance by an obstructing ring of the pubo-rectal fibers of the Levator Ani, of its own weight, and the added force of the intra-abdominal pressure, is pushed through the Hiatus Genitalis. The descent of a retroverted uterus is accelerated because intra-abdominal pressure is exerted now upon its anterior surface and its shape is better accommodated by the ovoid Hiatus Genitalis, which the uterus now approaches at an angle that brings it into the plane of the vagina which from above courses downward and forward.

The bladder, which is in close connection with the uterus, is dragged down, becomes prolapsed and is recognized as a cystocele.

The problem of providing a maximum amount of comfort, yet using a simple device, for predominantly two classes of patients presenting themselves for treatment of cystocele and retroversion, at the post-partum clinic of the New York Lying-In Hospital, prompted the investigation which resulted in the production of the improved pessary.

The pessary is made in three sizes, of hard rubber; the intermediate one is the one most frequently adaptable.

The two groups of patients referred to that seek relief are the following:

1. The nursing mother who agrees to an operation but in whose case it seems advisable to wait until the child-bearing period is over, since operations are not always successful and subsequent muscle injury during childbirth is always imminent.
2. The woman who refuses operation.

The pessary when adjusted should lie horizontally in the vagina. When so placed the posterior curve of the pessary will be pushing up against the relaxed utero-sacral ligaments, the cervix will fit nicely into the cervical orifice and the cystocele will be pushed up out of sight, coming to rest as it does upon the supporting transversely-grooved convex hiatal bridge, in which perforations are provided for drainage. The transverse grooves offer resistance to the sliding vaginal mucous membrane.

The pessary in place, possesses in a way the corrective features of the uterus, as utilized in the subvesical interposition operation for cystocele, obstructing the Genital Hiatus from a point behind the pubis to a point just anterior to the cervix, and from side to side over an area of three fingers' breadth, bringing the lateral borders of the pessary well beyond the margins of that part of the Levator Ani muscles which encircle the Genital Hiatus. With the greater weight in front (bladder and part of the weight of the uterus), the pessary is propelled through an arc downward, backward and upward, thus increasing the supporting ability of that part of the pessary which is under the relaxed utero-sacral ligaments.

This action does four things, namely:

1. Pulls cervix back and upward.
2. Maintains the uterus in anteversion.
3. Tightens slack of prolapsed bladder.
4. Returns bladder to normal position.

The pessary that I have here described is not offered as an instrument for causal relief, but as an adjuvant for symptomatic amelioration of a pathological condition which in gynecological and obstetrical practice confronts us constantly and is meant for those patients who refuse operation, and for those in whom temporary or permanent contra-indications exist for operative correction of the cause. In these we must resort to the use of a pessary if we are to help the patient at all, and the pessary bringing about the maximum correction and restoration of physiological function, at the expense of a minimum amount of discomfort, will afford the greatest amount of relief.

The desiderata for such a pessary are:

1. Maximum mechanical correction and anatomical reposition.
2. Relief to the patient (Physical-Psychic).
3. Light weight.
4. Should not be visible.
5. Should not interfere with coitus.
6. Should not interfere with nozzle douche.

The pessary in question thoroughly fulfils all the requirements enumerated, except in cases where muscle injury has been extreme.

Section of Obstetrics and Gynecology, January 25, 1927

THE DISADVANTAGES OF THE PROLONGED PERIOD OF REST IN BED POST-PARTUM

H. J. Epstein
A. J. Fleischer

A study of 446 uncomplicated spontaneous labors revealed the following facts:

Patients were allowed to sit up in bed within the first forty-eight to seventy-two hours, having been allowed to move about in bed within the first twenty-four hours. They were allowed to get out of bed within the first four days, one patient leaving the bed on the third day. The average day out of bed was the sixth day. There were twenty-seven cases of fever, nine of which had upper respiratory infections on admission, making a gross and net percentage morbidity of six and four, respectively. In only one case was temperature attributed to pelvic pathology, and that in a patient with a history of gonorrhœa.

Early rise favored the more rapid involution of the uterus and its ligaments. The use of the catheter, enemata and other therapeutic adjuvants was reduced to a minimum. To facilitate the act of urination and defecation, patients were allowed to sit up in bed on a commode, within the first forty-eight hours, or, if necessary, taken to the bathroom by a nurse after the first seventy-two hours. Venous stasis, with resultant thrombi and emboli, was prevented by early return to activity of the puerperal mother. The general muscular tonus, the blood-vascular and excretory systems were benefited by this early rise.

Early rise out of bed does not predispose to retroversion and prolapse as is claimed by some authors. On the contrary, hastening of the process of involution by early return to activity prevents retroversion and prolapse.

PROCEEDINGS OF ACADEMY MEETINGS, MAY, 1927

Stated Meeting

Thursday evening, May 5, at 8:30 o'clock

ORDER

I. Executive session.
Election of Fellows.
Action on amendments to constitution and by-laws.
II. Papers of the evening.
A Symposium on Tropical Diseases:
a. Certain conditions of the digestive tract in Porto Rico and their relation to sprue, Bailey K. Ashford, Porto Rico (by invitation).
b. Comment on tropical diseases of interest in New York City—a brief review, Claude H. Lavinder, U. S. Public Health Service.
c. The question of immunity and superinfection in yaws, Andrew W. Sellards, Boston (by invitation).

Thursday evening, May 19, at 8:30 o'clock

ORDER

I. Executive session.
II. Papers of the evening.
A Symposium on the Thyroid:
a. The relation of hyperthyroidism to benign tumors of the thyroid gland, William F. Rienhoff, Jr., Baltimore (by invitation).
b. The thyroid gland and its relation to disease, David Marine.
c. The use and abuse of iodin in the treatment of goitre and the intensive pre-operative iodin treatment of exophthalmic goitre, Emil Goetsch.
d. X-ray therapy in thyrotoxicosis, William H. Meyer (by invitation).

Section of Surgery

Friday evening, May 6, at 8:30 o'clock

ORDER

I. Reading of the minutes.

II. Presentation of cases.

a. Giant cell (?) tumor of the lower end of the radius. Cured by roentgen therapy, Leon T. LeWald.

b. Major thoracoplasty for chronic empyema, 2 cases, John H. Garlock.

c. Colic intussusception, Edward D. Truesdell.

d. 1. Injury to the common bile duct with repair, 2 cases.

2. Congenital absence of the genital organs in a girl, Thomas H. Russell.

e. Anti-colic Polya resection of the stomach with enteranastomosis, 3 cases, Charles L. Gibson.

f. 1. Perforated duodenal ulcer. Dehiscence of wound.

2. Perforated duodenal ulcer. Acute appendicitis 2½ years post-operative.

3. Perforated duodenal ulcer. Recurrence of symptoms within 3 months, J. William Hinton.

g. 1. Gastro-jejunal-colic fistula.

2. Perforated duodenal ulcer simulating common duct stone, Edward C. Brenner.

III. Papers of the evening.

a. Perforated duodenal ulcer, Edward C. Brenner.

b. Gastric secretion after subtotal gastrectomy, Eugene Klein.

IV. Demonstration of specimens.

Ulcerated colitis, improved by caecostomy, Nelson W. Cornell.

V. Demonstration of instruments.

Apparatus for direct blood transfusion developed by Dr. Robert W. Thayer, Marius Greene.

VI. Executive session.

Election of officers:

For Chairman, Morris K. Smith.

For Secretary, Edward D. Truesdell.

Section of Neurology and Psychiatry

Tuesday evening, May 10, at 8:30 o'clock

ORDER

I. Reading of the minutes.
II. Presentation of cases.
    a. Skull fracture with unusual clinico-pathological manifestations (pathological specimen), L. Beverley Chaney (by invitation).
III. Papers of the evening.
    a. Static innervation, Joseph Feser (by invitation).
    b. Cerebral circulatory mechanisms. Vasomotor effects, Harold Wolff (by invitation).
IV. Executive session.
    Election of officers:
    For Chairman, Walter M. Kraus.
    For Secretary, Junius W. Stephenson.

Section of Pediatrics

Thursday evening, May 12, at 8:00 o'clock

This meeting is a clinical one. It is desired that all patients be at the Academy of Medicine punctually at 8 P. M., for observation, in order that they may not be detained too late.

I. Presentation of cases.
    a. Babies' Hospital, 2 cases.
    b. Bellevue Hospital, 1 case.
    c. Mount Sinai Hospital, 2 cases.
    d. Nursery and Child's Hospital, 2 cases.
    e. Post-Graduate Hospital, 2 cases.
    f. Presbyterian Hospital, 2 cases.
    g. Saint Mary's Hospital, 2 cases.
    h. Vanderbilt Clinic, 2 cases.
    i. Willard Parker Hospital, 1 case.
    j. Woman's Hospital, specimens.
II. General discussion.
III. Executive session.

Election of officers:
For Chairman, W. R. May.
For Secretary, Stafford McLean.

Section of Otology

Friday evening, May 13, at 8:30 o'clock

ORDER

I. Reading of the minutes.
II. Presentation and report of cases.
  a. Results obtained from the modified radical mastoidectomy in children and young adults, Hugh B. Blackwell.
  b. Four cases of early cortical mastoid perforation, James W. Babcock.
  c. Bilateral suppurative mastoiditis, sepsis simulating malnutrition, without middle ear or mastoid symptoms, Bernard Welt (by invitation).
  d. 1. Congenital nystagmus in conjunction with double mastoidectomy and cerebellar symptoms.
    2. Case of luetic basilar meningitis, with double facial nerve paralysis, Marvin F. Jones.
  e. Additional case presentation and reports.
III. General discussion.
IV. Executive session.
  Election of officers (nominees to be announced later).

Section of Ophthalmology

Monday evening, May 16, at 8:30 o'clock, sharp

ORDER

I. Reading of the minutes.
II. Papers of the evening.
  a. Chronic granular conjunctivitis in *Macacus rhesus* and chimpanzee, induced by a microörganism isolated from cases of American Indian trachoma, Hideyo Noguchi (by invitation).

Discussion by Geo. E. deSchweinitz, Philadelphia, Wm. H. Wilmer, Baltimore (by invitation), F. H. Verhoeff, Boston (by invitation), F. I. Proctor, Boston (by invitation).

b. Theory and technique of the squint operation, Henning Rönne, Copenhagen (by invitation).

Discussion.

III. Executive session.

Election of officers:

For Chairman, Bernard Samuels.

For Secretary, Thomas H. Johnson.

Section of Medicine

Tuesday evening, May 17, at 8:30 o'clock

ORDER

I. Papers of the evening.

From the Littauer Pneumonia Fund of New York University, the Medical Service of Harlem Hospital, and the Research Laboratory of the Department of Health.

a. The leucocytes in pneumonia (supravital technique), Jesse G. M. Bullowa, Milton B. Rosenbluth, Anna K. Merkin (by invitation).

b. *The leucocytes in pulmonary tuberculosis, Jesse G. M. Bullowa, Mary Dunning Rose (by invitation), Miss Judith Gideon (by invitation).

c. The precipitin reaction of antipneumococcus sera and its relation to protective potency, Harry H. Sobotka, Miss Mae Friedlander (by invitation).

d. Antibody and specific substance in the blood of treated and control cases of lobar pneumonia, William H. Park, Miss Georgia Cooper (by invitation).

* This study is from Riverside Hospital.

II. Executive session.

Elcetion of officers:

For Chairman, Henry James.

For Secretary, Ralph H. Boots.

Section of Genito-Urinary Surgery

Special Notice

There will be no scientific meeting of the Section in May.
A special meeting will be called for the election of officers.
For Chairman, Stanley R. Woodruff.
For Secretary, John Sturdivant Read.

Section of Orthopedic Surgery

Friday evening, May 20, at 8:30 o'clock

ORDER

I. Reading of the minutes.
II. Presentation of cases.
   a. Remarks on the physiology of bone in relation to tumor formation. Lantern slides, Eugene H. Eising.
   b. Bone malignancy—distribution, age, incidence, x-ray findings, etc. Lantern slides, Henry W. Meyerding, Rochester (by invitation).
   c. Bone sarcoma—prognosis based on a careful study of end-results following various methods of treatment, William B. Coley.

   Discussion, Fred H. Albee, Ralph E. Herendeen (by invitation), Douglas Quick, Max A. Goldzieher (by invitation), Frank E. Adair.
III. Executive session.
   Election of officers:
   For Chairman, Arthur Krida.
   For Secretary, Elmer P. Weigel.

Section of Laryngology and Rhinology

Wednesday evening, May 25, at 8:30 o'clock

ORDER

I. Reading of the minutes.
II. Clinical meeting.
   Presentation and report of cases.

III. Executive session.
Election of officers:
For Chairman, Arthur Nilsen.
For Secretary, Westley M. Hunt.

SECTION OF OBSTETRICS AND GYNECOLOGY

Tuesday evening, May 31, at 8:30 o'clock

ORDER

I. Case reports.
a. Twin pregnancy following temporary suppression of the menses, Ira I. Kaplan.
b. Three cases of hypo-ovarian function, treated by x-ray, I. Seth Hirsch.
II. Papers of the evening.
a. The nasal application of pituitary extract for obstetrical purposes, J. Hofbauer, Johns Hopkins University (by invitation).
b. Dry labor, true and false, Alfred L. Madden, Albany (by invitation).
c. A new instrument for excision of diseased endocervix with surgical diathermy, Mortimer N. Hyams (by invitation).
III. Executive session.
Election of officers:
For Chairman, Hervey C. Williamson.
For Secretary, Thomas H. Cherry.

CONSTITUTION AND BY-LAWS

The amendments to the Constitution and By-Laws which were presented at the Stated Meeting held on March 17, and which were distributed to the Fellows, were approved at the Stated Meeting held on May 5. The following further amendments which were recommended by the Committee on By-Laws and approved by the Council will be printed and distributed to the Fellows about September 1, and will come up for action at the Stated Meeting which will be held on October 6, 1927.

Constitution.

Article II, Section 2—to be amended by inserting after the word "residing" the words "or having an office."

Article VII to be amended by striking out the words "the Academy may be divided into as many Sections" and making it read: "Scientific Sections may be organized."

By-Laws.

Article XII, Section 3, paragraph *f*.—Omit last clause reading: "With the names of his endorsers and the source of his diploma." Note: This is already included in paragraph *c*, and it is unnecessary to have it, for the names of the endorsers and the source of diploma would then be printed twice. The name and address are sufficient when recommended for election.

Article XII, Section 4—Remove this Section from Article XII and insert as a new article to follow Article XIX and omit words "Honorary Fellowship," from this section and number new Section XX. Section 2 of new Article XX to read: "Election to Honorary Fellowship shall be held at a Stated Meeting of the Academy and shall be by ballot on such candidates as have been recommended by the Council in accordance with Article IX, Section 4 of these By-Laws, and three-fourths of the Fellows present and voting," etc.

Changes in Wording Recommended

Article X, Section 5—Insert at the end "or by two members of the Board of Trustees."

Article XII, Section 5—Transfer word "make" from its present situation to follow the word "shall."

Particular attention is called to

Article XI, Section 2—No loan or investment of the monies or trust funds of the Academy shall be made except in such investments as are legal for trust funds in the State of New York.

During the past year, the Trustees have given a great deal of time and attention to the question of the investments of the Academy. The Trustees authorized the appointment of a Finance Committee, which now consists of the President and the Treasurer and Drs. Brown, Pool and Miller. Subsequent to the

appointment of this Committee, a special Advisory Committee on Finance was appointed. This Committee consists of Mr. Edwin G. Merrill, President of the Bank of New York and Trust Company, Mr. George Blagden, of Clark Dodge and Company, Mr. James B. Mabon, of Mabon and Company, Dr. Edward Peaslee, formerly President of the Fidelity Bank, and Mr. Gerrish H. Milliken.

Conferences with various members of this Advisory Committee have occurred, and a meeting was held on April 19, at which were present Drs. Lambert, Dana, Stewart, Milliken, Miller, Pool and Williams and Messrs. Merrill, Mabon and Blagdon. At this meeting it was pointed out by the three members of the Advisory Committee present that all of the larger educational and charitable organizations in New York were not hampered in the investment of their funds by restrictions which limit the investment to securities legal for trust funds. The Advisory Committee pointed out that the Trustees of the Academy by and with the advice of a special advisory committee could without undue risk invest in securities which were not legal for trust funds. The Committee recommended that the restrictions imposed by the above by-law be removed.

This matter was discussed at the Trustees' meeting and at the Council, and both bodies recommend that the above by-law be omitted.

RECENT ACCESSIONS TO THE LIBRARY

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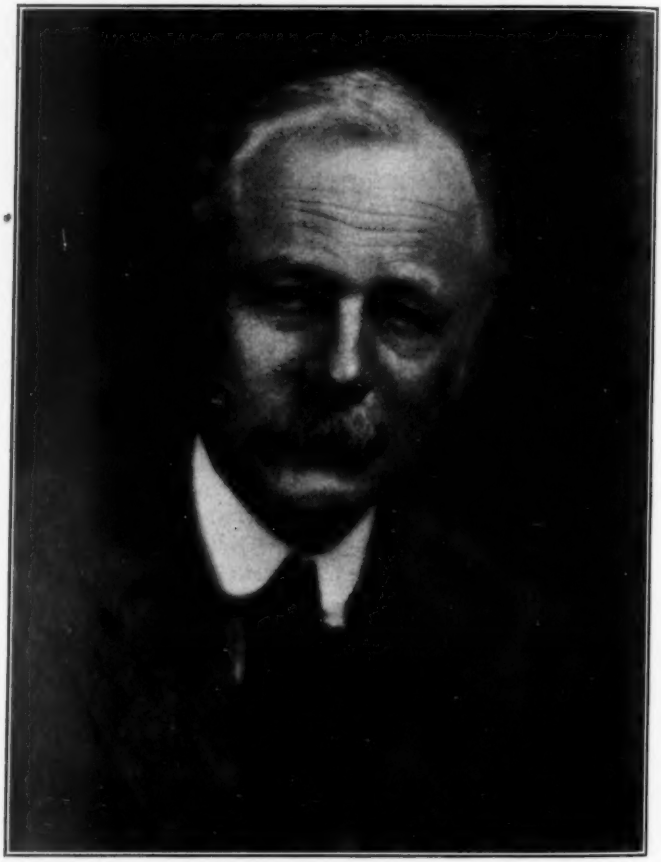
FELLOWS ELECTED MAY 5, 1927

David Goldblatt, M.D., 595 West End Avenue.
Henry Robert Kutil, M.D., 105 East 80th Street.
James Raymond Lutz, M.D., 21 West 74th Street.

For Associate Fellowship

Enid Muriel Oppenheimer, B.Sc., 124 East 61st Street.



DR. WALTER B. JAMES

OBITUARY NOTICES

DR. WALTER B. JAMES

The medical profession of New York suffers a great loss by the death of Dr. Walter B. James.

Dr. James was born in Baltimore, May 5, 1858, and died in New York, April 6, 1927. He graduated from Yale College in 1879, and after studying biology for a year at Johns Hopkins University he entered the College of Physicians and Surgeons of New York, from which he graduated in 1883. He had his medical training in Roosevelt Hospital and supplemented it by two years in the clinics of famous internists of Austria and Germany, and in the laboratories of Virchow and Koch.

He began to practice in New York in 1886. His professional life was closely identified with two institutions: the Medical College of Columbia University and The New York Academy of Medicine, and he was in succession attending physician to Bellevue, Roosevelt and Presbyterian Hospitals.

In Columbia University Medical School he passed from Clinical Lecturer in 1892 to Professor of Practice of Medicine in 1902. He filled the latter position nine years, and then resigned to become Professor of Clinical Medicine, which he remained until 1918. He was one of the most active members of the New York State Hospital Development Commission which was established in 1915, was the first Chairman of the State Commission for Mental Defectives following its creation in 1918, served for a number of years as President of the National Committee for Mental Hygiene, and was a leading member and advisor of the New York State Committee on Mental Hygiene of the State Charities Aid Association. During the latter years of his life he served Columbia University as Trustee.

Dr. James was elected a Fellow of the Academy in 1889. He was Vice-President, 1912–1914, President, 1915–1918, and Trustee since 1919. He served the Council continuously from 1912 to the time of his death. He was deeply concerned with the Academy's material and spiritual prosperity and he spared no strength or sacrifice to promote its projects and promises. During his Presidency the entire program for the stated meetings fell upon him; so many of his colleagues were absent in the War. These

programs were replete with practical subjects whose chief aims were to aid, enlighten and encourage the general practitioner. In the Council of the Academy he was always conservative in his suggestions for safeguarding the Academy's funds, but radical in his views about membership. He thought that any honest, intelligent, dignified, serious member of the medical profession should be eligible for membership and thus be benefited by the educational advantages of the institution.

In Walter Belknap James, heart and mind blended to produce a lovable personality; in action they constituted the ideal physician. But he was more than a great doctor; he was an adornment to the scientific and social life of his period, a good citizen, a perfect friend.

He would have gone to the top in any walk of life, for he had ability, insight, imagination, energy and charm; and he loved his fellow-men. He loved them theoretically, practically, individually, collectively. He liked to be with them, to orient them, comfort them, encourage them to live, abjure them to love, teach them to die. I never heard him sit in adverse judgment upon a colleague; I never heard him speak ill of anyone in public or in private life, and he could see loveliness in character more universally than any man I have ever known. He could translate with ease and mastery a passion out of one breast into another and divide a sorrow out of itself. He knew how to boost the weary and burdened as they strove to mount the hills of life and to carry the wounded and feeble through the valleys.

I never knew him to divide himself from any man upon the difference of an opinion, or to be angry with his judgment for not agreeing with him; though he had respect of authority and was ever ready to use the civility of the knee, self-reliance was the corner-stone of the Esculapian temple which he erected and which adorned and served New York for more than thirty years.

He was an easy person to take from and a most difficult one to give to. I never went to him in pain, predicament or prejudice without getting relief, light and delivery. Hundreds could give similar testimony and would welcome the opportunity.

He was prodigal to lavishment of his strength, his possessions and his gifts. His patients, his profession, his fellow-beings concerned him always, himself, never. His career as practitioner, consultant, professor, president and trustee attests it. He was

a champion of truth and by birth and training was fitted to take up the gauntlet in the cause of verity. Though he was born into riches, and it was his fate to be wealthy, it neither hampered the freedom of his mind nor the frankness of his disposition.

He had an investigating turn of mind; his perceptions were keen, his apperceptions vigorous, his intuitions swift, his judgments sound. His original bent was for pure science, but his herd-urge drove him to medicine. Early in his career he came under the influence of three great physicians: the first a Master of the Science of medicine, the second of the Art, the third of the Amenities. He became the devoted friend and successor of Francis Delafield, William Draper and Edward Trudeau.

He was at the apogee of his career and not far beyond fifty when the symptoms of the disease to which he finally yielded first showed themselves. He confronted them with courage and equanimity and these possessions served him to the last moment. He never let them interfere at any time with what he considered to be his duty and his privilege: to serve man and to promote the welfare of physicians. As the evening approached when he should never sleep again but wake forever, he displayed as little apprehension and concern as Socrates did when told that the hemlock awaited him.

He believed in God's eternity and in His wisdom, and his conduct was consonant with his belief. The motto of his soul was "Service." Service to those who were beholden to him; to the enfeebled and infirm; to those who were seeking instruction that would fit them to combat disease; to the community, and to all eager for enlightenment and desirous to give earnest of their health and wealth.

His mind was stored with poetry, his heart was filled with kindliness, his purse was always in need of replenishment. He had one obsession: to help others; one ambition: to circulate the book of knowledge; one determination: to make life pleasanter for his patients and friends, saner for his contemporaries and successors.

He is survived by Mrs. James, who was Helen G. Jennings; a son, Oliver, Deputy Attorney-General of New York State; two daughters, Mrs. Henry H. Anderson and Mrs. Henry E. Coe, Jr., and several grandchildren.

JOSEPH COLLINS

DR. CHARLES HOWARD PECK

Dr. Charles H. Peck made a particularly notable contribution to practical surgery and to good citizenship.

He inherited the sturdy qualities of the New England pioneer. He applied his great talents to the developing and practicing of surgery and he was always a broad-minded citizen, interested in the affairs of the Commonwealth and striving for the high ideals which were a part of his nature.

After a general course of study in the schools of his native town, Newtown, Connecticut, and the completion of the prescribed course of medical study in the College of Physicians and Surgeons in New York, he was graduated in 1892 with the highest honor which that institution then gave, the first Harsen Prize.

His three years' internship in the New York Hospital included both medical and surgical training. The good record which he made there resulted in his appointment as Attending Surgeon to the then recently-established French Hospital in 1897. He was then only twenty-seven years old and only two years had elapsed since his hospital internship.

With the advantages of this position, his general executive ability and his marked surgical talent soon led to the establishment of a valuable surgical service. He there made a notable contribution to the surgery of rectal cancer. He appreciated the possibility of ligating the protruding end of a well-mobilized upper segment of intestine and thus promoting the cleanliness of the wound during the first twenty-four or forty-eight hours of its healing. He found the procedure practicable and thus really established an epoch in the treatment of the disease. He continued his work at the French Hospital with marked success until 1909.

In 1903 he was appointed Assistant Surgeon to the Roosevelt Hospital. Three years later he was appointed Junior Surgeon, and in 1909 he became Attending Surgeon in that institution. Thus, at the age of thirty-nine, he was placed in control of a particularly important surgical service. He conducted this service with marked success for seventeen years, and made many contributions to the development of surgical science, particularly in the surgery of the stomach, the large intestine and the spleen.

At America's entrance into the World War he organized the Mackay Unit of the Roosevelt Hospital, which later made a notable record in carrying on the work of Base Hospital No. 15 at Chaumont, France. He was appointed Senior Consultant in General Surgery to the A. E. F. and was later recalled to this country to be one of the chiefs of the Department of General Surgery at Washington. He received the Distinguished Service Medal from the United States Government in 1919, and was twice similarly honored by France.

He was Professor of Clinical Surgery in Columbia University for many years.

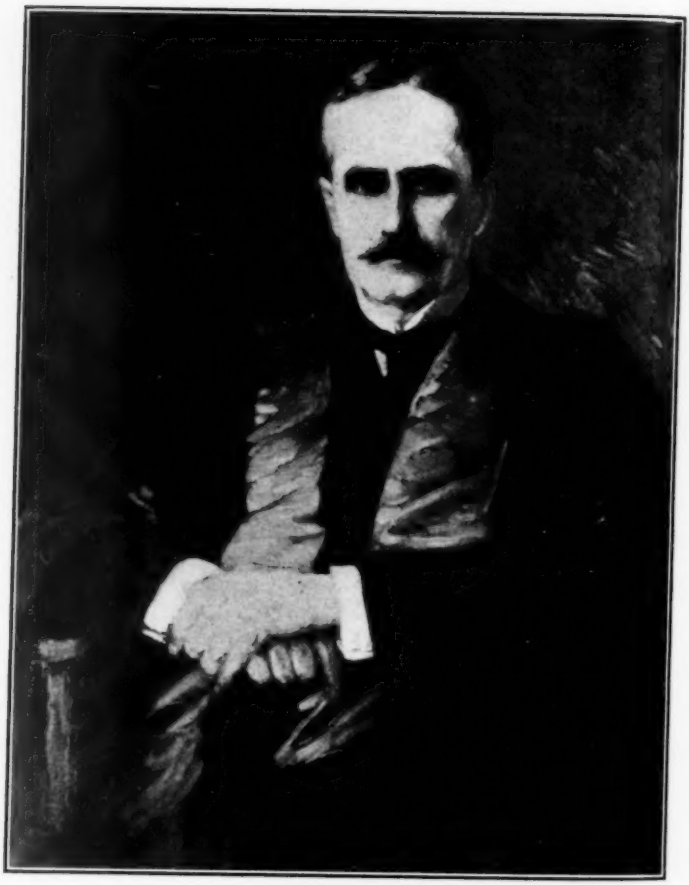
He was active in the work of the Academy of Medicine, serving as Chairman of the Surgical Section and as Vice-President of the Academy. He also served as President of the County Medical Society. He was a member of many surgical societies and was consulting surgeon to several hospitals.

He was interested in forestry, in farming, and the other enjoyments of country life. He maintained a model farm and a valuable herd of Guernsey cattle at Newtown, Connecticut, and kept up public-spirited and helpful interests in the life of the community.

His family life was particularly happy, but the death of his eldest son while in the war service in France was greatly mourned.

He had a peculiar charm of personality. One of his associates said he never heard anyone "knock Peck." His kindness, thoughtfulness, generosity and general helpfulness and fairness were most noteworthy. He had a host of friends, and those who knew him intimately and the many young men whom he trained in surgery were his loyal admirers.

CHARLES N. DOWD



DR. ROBERT F. WEIR

DR. ROBERT F. WEIR

Dr. Robert Fulton Weir, who was President of The New York Academy of Medicine from 1900 to 1903, died April 4th at the age of ninety, after a gradual decline of strength due to his years.

He was the last survivor of a distinguished company of surgeons of New York City, among whom were Sands, Markoe, Thomas, Bull, McBurney, McCosh, and Hartley.

As professor of surgery in the College of Physicians and Surgeons, from 1873 to 1903, he taught many of the men of this country now distinguished, who came from all parts to attend his clinics and to watch his operations, and he imbued them with enthusiasm for their profession, as well as sound knowledge of its principles. His wide experience, gained chiefly in the Civil War, in which he served as surgeon in charge of the hospital of Frederick, Maryland, one of the largest Government hospitals, from 1862 to 1865; his ample knowledge of surgery gained by familiarity with home and foreign literature; his skill in the varied lines of operative work; all combined to place him in the front rank of the surgeons of his time. And his genial nature, delightful personal manner, wide interest in art and letters and life outside of his profession, added to the esteem and affection in which he was held by his friends. He visited Europe many times and also went to Japan and China. Those of us who travelled with him found him keen in his appreciation of new places and sights, never weary and easily adapting himself to the discomforts of travel without complaint.

As Attending Surgeon in the New York Hospital from 1876 to 1903 he was an indefatigable worker, without regard for financial return, for during much of that period the hospital was given over to charity patients and private wards were not opened. This industry is evidenced by the very long list of his publications in the medical press during these years, more than a hundred being mentioned in the *History of the College of Physicians and Surgeons* published in 1900. During this period the introduction of Lister's methods of antiseptic and later of aseptic surgery was the subject of the greatest interest, and Prof. Weir was among the first to adopt, urge and teach the modern methods, which

eventually revolutionized surgical procedure. While his chief work was in abdominal surgery, he was the first in this country to operate for a brain tumor under the direction of Seguin, and the success of that operation led him to make many contributions to the surgery of the head and brain. There is hardly any field of surgery in which his published articles do not increase knowledge. And his diagnostic wisdom and good judgment combined with his skill in operative procedure added to his reputation, and in many lines made him the chief authority of his time.

His ability was acknowledged everywhere by his confrères. He was elected president of the American Surgical Association in 1900, member of the International Surgical Association, president of the New York Surgical Society, of the Practitioners' Society, of The New York Academy of Medicine and of the Greater New York Medical Society. In 1895 he was made a corresponding member of the Société de Chirurgie of Paris; and in 1905 an honorary fellow of the Royal College of Surgeons of England. At the close of his hospital service during the Civil War he was publicly thanked in the general orders of the Surgeon-General's Office.

Dr. Weir was twice married. His first wife was Maria Washington McPherson, of Virginia, whom he met during his surgical service in Frederick, and who for many years made his home a delightful centre of entertainment. They had one daughter, Mrs. La Montagne, in whose home Dr. Weir spent the last years of his life. His second wife, who was Mrs. Alden, died a few years after their marriage.

M. Allen Starr

Isham Green Harris, M.D., Brooklyn State Hospital, Brooklyn, N. Y.; graduated in medicine from New York University in 1890; elected a Fellow of the Academy January 3, 1918; died April 21, 1927. Dr. Harris was a Fellow of the American Medical Association, a member of the American Psychiatric Society, a member of the Neurological Society and Superintendent of the Brooklyn State Hospital.

HERBERT CERDA DE VILARRESTAU CORNWELL, A.B., M.D., 40 East 41st Street, New York City; graduated in medicine from Harvard Medical School in 1900; elected a Fellow of the Academy November 7, 1912; died April 25, 1927. Dr. Cornwell was a Fellow of the American Medical Association, a member of the American Psychiatric Society and consulting physician to the Neurological, Fordham and Rockaway Beach hospitals.

SEYMOUR BASCH, M.D., 40 West 88th Street, New York City; graduated in medicine from University Medical College, New York City, in 1894; elected a Fellow of the Academy January 7, 1909; died April 26, 1927. Dr. Basch was a Fellow of the American Medical Association, a member of the American Gastro-Enterological Society, a member of the Alumni Association of Lenox Hill Hospital, attendant physician at Lebanon Hospital and consultant Gastro-Enterologist to Rockaway Beach Hospital.

HENRY KOPLIK, A.B., M.D., 30 East 62nd Street, New York City; graduated in medicine from the College of Physicians and Surgeons, New York City, in 1881; elected a Fellow of the Academy October 4, 1888; died April 30, 1927. Dr. Koplik was a Fellow of the American Medical Association, a member of the American Society of Physicians, a member of the American Pediatric Society, consulting pediatrist to Mt. Sinai Hospital, and consulting physician to the Hospital for Joint Diseases and the Jewish Maternity Hospital.

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